

STUDENT NAME _____ DRIVER S LICENSE # _____



MANDATORY FIREFIGHTER SKILLS EVALUATION FORM

STUDENT NAME (Last, First MI) _____

DRIVERS LICENSE # _____ FF CERTIFICATION # (If any) _____

FIRE DEPARTMENT/AGENCY _____ COUNTY _____

TEST LOCATION _____ IDHS COURSE # _____

	Skill	DATE	PASS	EVALUATOR SIGNATURE
2 1	DON AND DOFF ARTICLES OF PROTECTIVE CLOTHING/EQUIPMENT			
3 1	DONNING SCBA FACE MASK (ATTACHED FACEPIECE MOUNTED REGULATOR)			
3 1a	DONNING SCBA FACE MASK (UNATTACHED FACEPIECE MOUNTED REGULATOR)			
3 2	DON SCBA BACKPACK USING CROSSED ARMS OR REGULAR COAT METHOD			
3 3	DON COMPARTMENT OR BACK UP MOUNTED SCBA BACKPACK			
3 4	CLEAN AND INSPECT AN SCBA UNIT (AFTER USE)			
4 1	CONDUCTING A PRIMARY SEARCH			
4 2	RESTRICTED OPENING REMOVAL			
4 3	DEMONSTRATE TECHNIQUES FOR ACTION WHEN TRAPPED OR DISORIENTED			
4a 1	USE HYDRAULIC SPREADER			
4a 2	USE HYDRAULIC SHEARS			
4a 3	BUILDING A BOX CRIB			
5 1	USE THE TWO FIREFIGHTER METHOD TO COULE HOSE			
5 2	DEMONSTRATE A BASIC STRAIGHT HOSE ROLL			
5 3	DEMONSTRATE A TWO PERSON DONUT HOSE ROLL			
5 4	PERFORM A STREET DRAG			
5 5	INSPECT CLEAN AND DRY HOSE			
5 6	INSPECT HOSE COUPLINGS AND REPLACE A HOSE GASKET			
5 7	ACCORDION LOAD AND UNLOAD HOSE			
5 8	FLAT LOAD AND UNLOAD HOSE			
5 9	PERFORM A SHOULDER LOOP HOSE CARRY			
6 1	OPERATE A FOG STREAM NOZZLE			
6 2	OPERATE A SOLID STREAM NOZZLE			
6 3	MAKE SOFT SLEEVE HYDRANT CONNECTION			
6 4	PERFORM A SINGLE SECTION DRAIN AND CARRY			
6 5	ADVANCE A LINE INTO A STRUCTURE			
6 6	ADVANCE A LINE DOWN AN INTERIOR STAIRWAY			
6 7	HANDLE A MEDIUM SIZED CHARGED HOSELINE (ONE FIREFIGHTER)			
6 8	HANDLE A MEDIUM SIZED CHARGED HOSELINE (TWO FIREFIGHTERS)			

STUDENT NAME _____

DRIVER'S LICENSE # _____

Skill		DATE	PASS	EVALUATOR SIGNATURE
6 9	HANDLE A LARGE SIZED CHARGED HOSELINE (TWO FIREFIGHTERS)			
	USE COMBINATION ATTACK TO CONTROL AND/OR SIMULATE EXTINGUISHMENT OF A			
6 10	CLASS A FIRE WITHIN A STRUCTURE			
7 1	DEMONSTRATE THE LOW SHOULDER ROOF LADDER LIFE AND CARRY (FROM VERTICAL FOR FLAT RACKING)			
7 2	DEMONSTRATE THE TWO FIREFIGHTER FLAT RAISE FROM A LOW SHOULDER CARRY			
	DEMONSTRATE THE ONE FIREFIGHTER LADDER RAISE FROM A LOW SHOULDER			
7 3	CARRY			
7 4	SECURE A RAISED LADDER			
	DEMONSTRATE THE TWO FIREFIGHTER LOW SHOULDER LADDER LIFE AND CARRY			
7 5	(FROM VERTICAL RACKING)			
9 1	PROPERLY BREAK ORDINARY PLATE GLASS			
9 2	USE AN ELECTRIC OR GASOLINE POWERED CIRCULAR SAW			
9 3	USE AN ELECTRIC RECIPROCATING SAW			
9 4	USE AN ELECTRIC OR GASOLINE POWERED CHAIN SAW			
9 5	FORCE AN OUT SWINGING DOOR			
9 6	FORCE AN IN SWINGING DOOR			
9 7	FORCE AN IN SWINGING DOOR (RABBETED JAMB)			
9 8	FORCE A CHECKRAIL (DOUBLE HUNG) WINDOW			
9 9	VENTILATE A PITCHED ROOF			
9 10	DEMONSTRATE MECHANICAL POSITIVE PRESSURE VENTILATION			
9 11	DEMONSTRATE MECHANICAL NEGATIVE PRESSURE VENTILATION			
9 12	DEMONSTRATE HYDRAULIC VENTILATION			
10 1	SAFELY MOUNT USE APPARATUS SAFETY EQUIPMENT AND DISMOUNT APPARATUS			

This check off sheet is intended to be used as a record of a student's performance of each skill listed. This sheet will serve as the permanent record of the practical skills testing for Mandatory Fire Fighter in the State of Indiana. This sheet should be used for the evaluation of the student, however, the Evaluator should refer to the IDHS Practical Skills Book for additional guidance on the proper completion of the demonstrated skill. REPORT ANY ERRORS OR PROBLEMS TO THE IDHS CERTIFICATION SECTION.

LEAD EVALUATOR CERTIFICATION OF SKILLS

I certify that the student identified on this form has successfully completed all practical skills listed.
Falsification of this information may result in disciplinary action against the Instructor or Evaluator
by the Board of Fire Fighter Personnel Standards and Education

SIGNED _____

DATE _____

Revised 7/06/06

LEAD EVALUATOR _____

PRINTED NAME _____

DON AND DOFF ARTICLES OF PROTECTIVE CLOTHING/EQUIPMENT

Introduction

Because firefighters must often dress rapidly to respond to an alarm, they should learn to consistently don and doff their protective clothing in a set order. Not only does such a donning/doffing routine save time, but it also reduces the possibility of omitting an article of clothing such as gloves or hood. In addition, items placed in the turnout gear pockets should be placed in the same pocket each time so that the firefighter will not have to search through pockets to find the item in an emergency.

Equipment and Personnel	Helmet with faceshield	Student Name
	Hood	
	Safety goggles	Instructor Name
	Boots	
	Gloves	Date
	Turnout coat	
	Turnout trousers/suspenders	

Job Steps	Key Points	PASS	FAIL
DONNING			
1 Don turnout trousers/suspenders.	1 a. Suspenders attached to trousers b. Shoes removed c. Trousers pulled on and fastened at waist d. Suspenders adjusted over shoulders		
2 Don boots	2 Trouser legs over boots		
3 Don protective hood	3 a. Pulled down around neck and shoulders b. No exposed hair		
4 Don turnout coat	4 a. Closed completely b. Collar turned up		
5 Don safety goggles	5 Strap adjusted for comfort		
6 Don helmet	6 a. Strap adjusted under chin b. Faceshield lowered		
7 Don gloves	7 No exposed skin between coat cuff and glove		
DOFFING			
1 Doff gloves	1 Placed in turnout coat pocket		
2 Doff helmet	2 a. Chin strap loosened b. Stored with front facing back of storage unit		
3 Doff safety goggles	3 Placed in turnout coat pocket or on storage shelf		
4 Doff protective hood	4 Placed in turnout coat pocket		
5 Doff turnout coat	5 a. Collar up and front completely unfastened b. Hung on storage hook		
6 Doff turnout trousers and boots	6 a. Suspenders removed from shoulders without loosening b. Front flap unfastened c. Trousers down around boot ankles, suspenders to each side d. Stepped out of boots and trousers at same time e. Placed boot/touser combination on floor under turnout coat, with boot toes facing back of storage unit		

DONNING SCBA FACE MASK (ATTACHED FACEPIECE-MOUNTED REGULATOR)

Introduction SCBA must be stored ready to don. The backpack straps should be arranged so that they do not interfere with picking up the cylinder. You do not need to wear protective gloves when donning SCBA, but you should be wearing all other turnout gear, and your turnout coat should be fully fastened.

Equipment and Personnel One firefighter in full protective clothing
SCBA in case, regulator mounted in facepiece

Student Name

Instructor Name

Date

Job Steps	Key Points	PASS	FAIL
DONNING THE CYLINDER			
1 Position and open the SCBA case	1 a. On clear, level surface b. Out of traffic flow		
2 Crouch or kneel at end of case	2 End opposite cylinder valve		
3 Check cylinder guage	3 a. Reads at least 90% of rated capacity b. Not in excess of rated capacity		
4 Open cylinder valve	4 a. Slowly b. Fully Note: The low-pressure alarm should ring briefly. If it continues to ring, check the regulator valves. If both valves are closed and it continues to ring, close the cylinder valve, remove the unit from service, tag it, and notify an officer. If it does not ring, place the unit out of service as described above. Obtain another unit and begin again at Step 1		
5 Crack the bypass valve	5 Removing unit from service and notifying an officer if you do not hear a rush of air		
6 Close the bypass valve	6 Fully		
7 Check the regulator gauge	7 a. Reads within 100 psi of cylinder gauge b. Donning switch (if applicable) in DONNING mode		
8 Position the harness straps	8 a. To each side b. Free of twists or tangles		
9 Grasp the backplate	9 a. At midpoint b. One hand on each side c. No straps between hands		
10 Tilt unit toward you.	10 a. Close to your body b. Valve at top		
11 Stand up	11 a. Lifting with legs, not back b. Unit held at waist level		
12 Lift the unit over your head	12 Elbows in		

Job Steps	Key Points		
13 Lower the unit down your back	13 a. Chin tucked in b. Leaning slightly forward c. Elbows through straps d. Backplate and straps sliding through hands		
14 Grasp the ends of the shoulder straps	14 a. With hand on same side as strap b. With whole hand c. Firmly		
15 Pull the shoulder straps	15 a. Downward and outward b. With quick jumping motion		
16 Fasten the chest strap (if applicable)			
17 Fasten and adjust the waist strap	17 Snug fit		
DONNING THE FACEPIECE			
18 Adjust your turnout gear	18 a. Helmet off* or on shoulder b. Hood down around neck *Note: Helmets with a breakaway strap that completely disconnects may be donned after the facepiece and hood are in place		
19 Grasp the facepiece	19 a. With both hands b. Harness at top c. Thumbs through straps		
20 Spread the harness straps apart	20 a. With thumbs b. Fully		
21 Position the facepiece	21 a. Firmly against face b. Chin centered in cup		
22 Pull the harness into position	22 a. Moving hair out of seal area b. Over top of head c. Centered at back of head d. Untangled		
23 Pull the harness straps	23 a. Toward back of head b. Evenly and simultaneously c. Lower straps first d. Temple straps next (if applicable) e. Top strap last (if applicable) f. Snug but not too tight fit Note: For a two-strap harness, tighten the neck straps, and then stroke the harness firmly down the back of the head. Retighten the neck straps as necessary.		
24 Close the cylinder valve	24 Fully		
25 Inhale to test facepiece seal	25 a. Slowly b. For 10 seconds c. Retightening harness straps if mask does not collapse against face		
26 Exhale to test the exhalation valve	26 a. Gentle exhalation b. Repeating steps 19 through 25 if air does not exit through exhalation valve.		
27 Open the cylinder valve	27 Fully		
28 Inhale			
29 Press the facepiece to your face	29 a. With both hands b. Around seal area of facepiece		
30 Exhale	30 a. Gently*		

Job Steps	Key Points	PASS	FAIL
	b. Removing facepiece from service if air does not exit through exhalation valve		
	*CAUTION: Exhale gently against a sealed facepiece in order to prevent possible damage to the inner ear from exhaling too forcefully.		
31 Test for positive pressure	31 a. Two fingers between mask and face		
	b. Removing unit from service if air does not exit past fingers under pressure		
32 Reposition your protective hood	32 a. Head and neck completely covered		
	b. Vision unobscured		
	c. No part of hood between facepiece and face		
	d. No hair showing		
33 Don the helmet	33 a. Earflaps down (if applicable)		
	b. Firmly on head		
	c. Chin strap adjusted firmly under chin		
34 Raise your coat collar	34 a. All the way around		
	b. Fastened to closure (if applicable)		

DONNING SCBA FACE MASK (UNATTACHED FACEPIECE-MOUNTED REGULATOR)

Introduction SCBA must be stored ready to don. The backpack straps should be arranged so that they do not interfere with picking up the cylinder. You do not need to wear protective gloves when donning SCBA, but you should be wearing all other turnout gear, and your turnout coat should be fully fastened.

Equipment and Personnel One firefighter in full protective clothing
SCBA in case, regulator mounted to facepiece

Student Name _____

Instructor Name _____

Date _____

Job Steps	Key Points	PASS	FAIL
DONNING THE CYLINDER			
1 Position and open the SCBA case	1 a. On clear, level surface b. Out of traffic flow		
2 Crouch or kneel at end of case	2 End opposite cylinder valve		
3 Check cylinder gauge	3 a. Reads at least 90% of rated capacity b. Not in excess of rated capacity		
4 Open cylinder valve	4 a. Slowly b. Fully Note: The low-pressure alarm should ring briefly. It is continues to ring, check the regulator valves. If both valves are closed and it continues to ring, close the cylinder valve, remove the unit from service, tag it, and notify an officer. If it does not ring, place the unit out of service as described above. Obtain another unit and begin again at Step 1		
5 Crack the bypass valve	5 Removing unit from service and notifying an officer if you do not hear a rush of air		
6 Close the bypass valve	6 Fully		
7 Check the regulator gauge	7 a. Reads within 100 psi of cylinder gauge b. Donning switch (if applicable) in DONNING mode		
8 Position the harness straps	8 a. To each side b. Free of twists or tangles		
9 Grasp the backplate	9 a. At midpoint b. One hand on each side c. No straps between hands		
10 Tilt unit toward you	10 a. Close to your body b. Valve at top		
11 Stand up and lift the unit	11 a. Lifting with legs, not back b. Unit at waist level		
12 Lift the unit over your head	12 Elbows in		
13 Lower the unit down your back	13 a. Chin tucked in b. Leaning slightly forward c. Elbows through straps		

Job Steps	Key Points		
	d. Backplate and straps sliding through hands		
14 Grasp the ends of the shoulder straps	14 a. With hand on same side as strap b. With whole hand c. Firmly		
15 Pull the shoulder straps	15 a. Downward and outward b. With quick jumping motion		
16 Fasten the chest strap (if applicable)			
17 Fasten and adjust the waist strap			
DONNING THE FACEPIECE			
18 Adjust your turnout gear	18 a. Helmet off* or on shoulder b. Hood down around neck *Note: Helmets with a breakaway strap that completely disconnects may be donned after the facepiece and hood are in place		
19 Grasp the facepiece	19 a. With both hands b. Harness at top c. Thumbs through straps		
20 Spread the harness straps apart	20 a. With thumbs b. Fully		
21 Position the facepiece	21 a. Firmly against face b. Chin centered in cup		
22 Pull the harness into position	22 a. Moving hair out of seal area b. Over top of head c. Centered at back of head d. Untangled		
23 Pull the harness straps	23 a. Toward back of head b. Evenly and simultaneously c. Lower straps first d. Temple straps next (if applicable) e. Top strap last (if applicable) f. Snug but not too tight fit Note: For a two-strap harness, tighten the neck straps, and then storothe the harness firmly down the back of the head. Retighten the neck straps as necessary.		
24 Insert the regulator into the facepiece port.	24 Seal obtained		
25 Inhale	25 a. Slowly b. For 10 seconds c. Retightening harness straps if mask does not collapse against face		
26 Exhale to test the exhalation valve	26 a. Gentle exhalation b. Repeating steps 19 through 25 if air does not exit through exhalation valve.		
27 Open the cylinder valve	27 Fully		
28 Inhale	28 a. Slowly b. For 10 seconds		
29 Press the facepiece to your face	29 a. With both hands b. Around seal area of facepiece		
30 Exhale	30 a. Gently* b. Removing facepiece from service if air does not exit through exhalation valve		

Job Steps	Key Points	PASS	FAIL
	*CAUTION: Exhale gently against a sealed facepiece in order to prevent possible damage to the inner ear from exhaling too forcefully.		
31 Test for positive pressure	31 a. Two fingers between mask and face b. Removing unit from service if air does not exit past fingers under pressure		
32 Reposition your protective hood	32 a. Head and neck completely covered b. Vision unobscured c. No part of hood between facepiece and face d. No hair showing		
33 Don the helmet	33 a. Earflaps down (if applicable) b. Firmly on head c. Chin strap adjusted firmly under chin		
34 Raise your coat collar	34 a. All the way around b. Fastened to closure (if applicable) c. Not in excess of rated capacity		

DON SCBA BACKPACK USING CROSSED-ARMS OR REGULAR COAT METHOD

Introduction This job sheet is divided into two parts, each part outlining the steps for donning the SCBA like a coat. Part 1 provides instructions for donning the SCBA using the crossed-arms method. This method requires that equipment be arranged so that both shoulder straps can be grasped for lifting. Part 2 provides instructions for donning the SCBA using the regular coat method in which the firefighter puts one arm at a time through the shoulder strap loops. This method requires that the unit be arranged so that either shoulder strap can be grasped for lifting.

Equipment and Personnel One firefighter in full protective clothing
SCBA backpack

Student Name

Instructor Name

Date

Job Steps	Key Points	PASS	FAIL
-----------	------------	------	------

DONNING THE BACKPACK (CROSSED-ARMS METHOD)

1 Position and open the SCBA case	1 a. On clear, level surface b. Out of traffic flow		
2 Crouch or kneel at end of the case	2 End opposite cylinder valve		
3 Check cylinder guage	3 a. Reads at least 90% of rated capacity b. Not in excess of rated capacity		
4 Open the cylinder valve	4 a. Slowly b. Fully Note: The low-pressure alarm should ring briefly. It is continues to ring, check the regulator valves. If both valves are closed and it continues to ring, close the cylinder valve, remove the unit from service, tag it, and notify an officer. If it does not ring, place the unit out of service as described above. Obtain another unit and begin again at Step 1		
5 Crack the bypass valve	5 Removing unit from service and notifying an officer if you do not hear a rush of air		
6 Check the regulator gauge	6 a. Reads within 100 psi of cylinder gauge b. Donning switch (if applicable) in DONNING mode		
7 Kneel, or bend down, and grasp the shoulder straps	7 a. Arms crossed left over right b. At top of harness c. Left hand holding left strap; right hand holding right strap Note: The next two steps should be performed in one smooth motion		
8 Stand up and lift the unit.	8 Lifting with legs, not back		
9 Swing unit around right shoulder	9 a. While raising left arm b. Bringing unit behind head and onto back c. Straps sliding through hands to the buckles		

Job Steps		Key Points	
10 Grasp the ends of the shoulder straps Note: Depending upon your physique, it may be more comfortable to fasten the chest buckle (Step 12) before tightening the shoulder straps.	10 a. With whole hand b. Firmly		
11 Pull the shoulder straps to adjust.	11 a. Downward and outward b. With quick jumping motion		
12 Fasten the chest strap (if applicable)			
13 Fasten and adjust the waist strap.	13 Snug fit		
14 Don the facepiece	14 Following method in Job Sheet 3-1 or 3-1a appropriate to your unit		
DONNING THE BACKPACK (REGULAR COAT METHOD)			
1 Position and open the SCBA case.	1 a. On clear, level surface b. Out of traffic flow		
2 Crouch or kneel at the end of the case.	2 At the same end as cylinder valve		
3 Check the cylinder gauge.	3 a. Should read at least 90% of rated capacity b. Not in excess of rated capacity		
4 Open the cylinder valve.	4 a. Slowly b. Fully Note: The low-pressure alarm should ring briefly. It is continues to ring, check both regulator valves. If both valves are closed and the bell coontinues to ring, close the cylinder valve, remove the unit from service, tag it, and notify an officer. If it does not ring, place the unit out of service as described above. Obtain another unit, and begin again at Step 1		
5 Crack the bypass valve.	5 Removing unit from service and notifying an officer if you do not hear a rush of air.		
6 Check the bypass valve.	6 a. Should read within 100 psi of cylinder gauge		
7 Position the SCBA for donning.	7 a. Harness straps spread to sides b. Upper portion of straps over top of backplate		
8 Kneel, or bend down, and grasp the left harness strap.	8 a. Top of strap with left hand b. Lower portion of same strap with right hand Note: The next two steps should be performed in one smooth motion		
9 Stand up	9 Lifting with legs, not back		
10 Swing the unit around your left shoulder	10 a. Left arm through left shoulder strap b. Bringing unit behind head and onto back c. Right hand released d. Right arm inserted through right shoulder strap e. Straps sliding through hands to the buckles		

Job Steps	Key Points	PASS	FAIL
11 Grasp the ends of the shoulder straps. Note: Depending upon your physique, it may be more comfortable to fasten the chest buckle (step 13) before tightening the shoulder straps.	11 a. With hand on same side as strap b. With whole hand c. Firmly		
12 Pull the shoulder straps to adjust.	12 a. Downward and outward b. With quick jumping motion		
13 Fasten the chest strap (if applicable).			
14 Fasten and adjust the waist strap.	14 Snug fit.		
15 Don the facepiece.			

DON COMPARTMENT OR BACK UP-MOUNTED SCBA BACKPACK

Introduction SCBA stored in a closed compartment can be ready for rapid donning by using any number of mounts. A mount on the inside of a compartment presents the same advantages as does side-mounted equipment. The backup mount provides quick access to SCBA. The following is the basic procedure for donning SCBA using the backup method. There may be slight variations for mounts from which the SCBA can be donned while seated.

Equipment One firefighter in full protective clothing
and Personnel Compartment - or backup-mounted SCBA

Student Name

Instructor Name

Date

Job Steps	Key Points	PASS	FAIL
1 Uncover the SCBA			
2 Remove the facepiece and place it nearby	2 a. Safe location b. Lens up		
3 Check the cylinder gauge.	3 a. Should ready at least 90% of rated capacity b. Not in excess of rated capacity		
4 Open the cylinder valve.	4 a. Slowly b. Fully Note: The low-pressure alarm should ring briefly. It is continues to ring, check the regulator valves. If both valves are closed and it continues to ring, close the cylinder valve, remove the unit from service, tag it, and notify an officer. If it does not ring, place the unit out of service as described above. Obtain another unit and begin again at Step 1		
5 Crack the bypass valve	5 Removing unit from service and notifying an officer if you do not hear a rush of air		
6 Check the regulator gauge	6 a. Reads within 100 psi of cylinder gauge b. Donning switch (if applicable) in DONNING mode		
7 Position yourself for donning	7 a. Back at cylinder backplate b. Arms through harness straps c. Hands grasping straps at shoulders		
8 Quickly step forward	8 Unit cleared from mount		
9 Slide your hands down, and grasp the end of the shoulder straps.	9 a. With whole hand b. Firmly		
10 Pull the shoulder straps to adjust.	10 a. Downward and outward b. With quick jumping motion c. Leaning slightly forward		
11 Fasten the chest buckle (if applicable).			
12 Fasten and adjust the waist strap.	12 Snug fit		
13 Don the facepiece	13 Following method in Job Sheet 3-1 or 3-1a appropriate to your unit		

CLEAN AND INSPECT AN SCBA UNIT (AFTER USE)

Introduction SCBA undergoes rough use. It is frequently exposed to temperature extremes and damp conditions. Inspection and cleaning after each use is essential in keeping the apparatus in top operating condition.

Equipment and Personnel

- One firefighter in full protective clothing
- SCBA
- Cleaner-disinfectant solution recommended by manufacturer
- Soft, lint-free towels
- 2 buckets, one for wash solution and one for clear rinse water
- Drying rack

Student Name _____

Instructor Name _____

Date _____

Job Steps	Key Points
-----------	------------

CLEANING/SANITIZING		PASS	FAIL
1 Submerge the facepiece and low-pressure hose.	1 a. Warm water b. Approved cleaner-disinfectant solution		
2 Wash the facepiece.	2 a. Inside and out b. With soft towel		
3 Dunk the facepiece.	3 a. Up and down. b. Until exhalation valve is clean		
4 Rinse the facepiece and low-pressure hose.	4 a. In clean, warm water b. Dunking up and down c. Thoroughly		
5 Dry the facepiece and low-pressure hose.	5 a. Thoroughly b. With clean, soft, lint-free towel c. Components hung on drying rack to completely air dry Note: For proper air purification and operation, it is <i>very important</i> that the hose interior be completely dry.		
6 Wipe the entire unit.	6 a. With approved cleaner-disinfectant b. With clean, soft towel c. Until cleaned and deodorized		
7 Wipe the carrying case or mounting area.	7 a. With approved cleaner-disinfectant b. With clean, soft towel c. Until cleaned and deodorized		
8 Wash and rinse the harness if necessary	8 a. With mild soap or commercial cleaning agent b. With clean, soft cloth c. Thoroughly, until cleaned and sanitized		
9 Hang the harness.	9 a. Out of sunlight b. To air dry		
10 Reassemble and inspect the unit.	10 After all components are thoroughly dry		

Job Steps	Key Points	PASS	FAIL
INSPECTION			
Note: If your inspection reveals damage or missing parts, notify an officer, red tag the unit, and place it out of service			
1 Check the cylinder pressure.	1 a. At least 90 percent full b. Pressure breathed off from high-pressure system CAUTION: The bypass should never be used to exhaust pressure unless the manufacturer specifically allows you to do so.		
2 Open the cylinder valve to check operation of gauges and low-pressure alarm.	2 a. Cylinder and regulator gauges within 100 psi of each other. b. Low-pressure alarm sounds briefly		
3 Check the high-pressure and low-pressure hose connections.	3 a. O-rings, gaskets, and screens (in place and undamaged) b. Connections (tight; no leaks)		
4 Check the condition of the low-pressure hose.	4 Stretched (no cracks)		
5 Visually inspect the condition of the facepiece material.	5 a. No drying b. No cracks c. Clean		
6 Visually inspect the condition of the facepiece lens.	6 a. No excessive scratches b. No cracks or separation from mask		
7 Visually inspect the exhalation valve and valve seat.	7 Clean (no foreign material)		
8 Visually inspect the diaphragm.	8 a. Flexible b. No small holes c. Clean (no foreign material)		
9 Check the high-pressure hose.	9 a. No wrinkles b. No excessive wear c. No tears		
10 Check the harness system.	10 a. Undamaged b. Straps fully extended		
11 Open and close the mainline and bypass valves to check operation.	11 Briefly		
12 Store the unit.	12 According to local protocol		

CONDUCTING A PRIMARY SEARCH

Introduction

The primary search is the first and most dangerous. It is a quick attempt to locate any potential victims who are in danger. The primary search should be as thorough as time and conditions permit.

Equipment and Personnel At least two firefighters dressed in full protective clothing and SCBA
 Forcible Entry Tool
 Flashlight
 Radio

Students Name _____

Instructors Name _____

Date _____

Job Steps	Key Points	PASS	FAIL
1 Start your SCBA airflow.	1 All members of team CAUTION: A safety officer will check your gear before you enter the structure. Make sure that no skin or hair is exposed!		
2 Position yourselves.	2 a. At entrance but out of doorway b. Force entry into structure		
3 The search team is often ahead of the attack lines and may be above the fire.			
4 Each room should be searched using a standard pattern.	4 a. Follow walls around the perimeter b. Reach toward the middle of the room to feel for victims c. Use handle of tool to extend reach d. Right hand/left hand-pick a direction and stick to it. e. Stay in contact with each other at all times f. Maintain voice communications at all times		
5 The search team may encounter closed doors.	5 Check the temperature of the door to determine if there is active fire on the other side before opening		
6 Upon completion of search.	6 a. Exit structure as team b. Report to command search complete		

RESTRICTED OPENING REMOVAL

Introduction During fire fighting operations, it may become necessary to remove SCBA and proceed through a restricted opening. In this job sheet, you learn how to remove your SCBA, proceed through restricted opening and reapply your SCBA.

Equipment and Personnel Two firefighters in full protective clothing including SCBA
 3' X 3' square opening
 Black out mask or waxed paper
 Hose line

Students Name _____

Instructors Name _____

Date _____

Job Steps	Key Points	PASS	FAIL
1 Two firefighters in full protective clothing	1 a. Wearing SCBA b. Breathing air		
2 Follow hose line 6' to restricted opening	2 a. SCBA mask blacked out b. Staying low as there may be super heated air		
3 Doff SCBA	3 a. Do not remove gloves		
4 Loosen straps	4 a. Completely		
5 Release chest strap (if applicable)			
6 Remove SCBA from back	6 a. Be careful to maintain seal on mask		
7 Place SCBA on the floor and push through restricted opening and follow by proceeding through opening	7 a. Do not remove SCBA mask b. Be careful to maintain seal on SCBA mask		
8 Advance along floor for 6'	8 a. Pushing SCBA in front of firefighter following hose line		
9 Don SCBA	9 a. Making sure to tighten all straps		
10 Position the SCBA for donning.	10 a. Harness straps spread to sides b. Upper portion of straps over top of backplate		
11 Kneel, or bend down, and grasp the left harness strap.	11 a. Top of strap with left hand b. Lower portion of same strap with right hand		
12 Swing the unit around your left shoulder	12 a. Left arm through left shoulder strap b. Bringing unit behind head and onto back c. Right hand released d. Right arm inserted through right shoulder strap e. Straps sliding through hands to the buckles		
13 Grasp the ends of the shoulder straps. Note: Depending upon your physique, it may be more comfortable to fasten the chest buckle before tightening the shoulder straps.	13 a. With hand on same side as strap b. With whole hand c. Firmly		

Job Steps	Key Points	PASS	FAIL
14 Pull the shoulder straps to adjust.	14 a. Downward and outward		
	b. With quick jumping motion		
15 Fasten the chest strap (if applicable).			
16 Fasten and adjust the waist strap.	16 Snug fit.		

DEMONSTRATE TECHNIQUES FOR ACTION WHEN TRAPPED OR DISORIENTED

Introduction It is imperative that the firefighter learn the correct safety procedures for exiting the fire area or summoning help when disoriented or trapped in a burning building. Procedures should be practiced routinely, and in the sequence listed below, until they become second nature.

Equipment and Personnel One firefighter in full protective clothing, SCBA, and PASS
 Dark plastic bag to fit over SCBA facepiece
 Two-story building, or training area having several rooms and halls
 Coupled lengths of hose advanced to "fire" area

Students Name _____

Instructors Name _____

Date _____

Job Steps	Key Points
-----------	------------

WHEN DISORIENTED		PASS	FAIL
1 Remain calm.	1 a. Stopping all movement		
	b. Breathing normally		
	c. Thinking		
2 Try to retrace your steps.	2 a. Finding hoseline		
	b. Following direction of male coupling toward exit		
	c. Remaining low		
	d. Descending stairs face toward top		
3 Make radio contact if retracing your steps in ineffective.	3 a. Describing your locations as accurately as possible		
4 Shout for help or bang on something to attract attention if a hoseline cannot be located or you cannot make radio contact.	4 a. Loudly		
	b. Moving in direction of response		
	NOTE: The SCBA facepiece makes it difficult to shout loudly, but the facepiece should not be removed. Shouting also uses up oxygen faster than normal speech. Unless you know that other firefighters are very near, reserve shouting for a last resort.		

WHEN TRAPPED			
1 Remain calm.	1 a. Stopping all movement		
	b. Breathing normally		
	c. Thinking		
2 Activate your PASS device.	2 Depressing manual switch		
3 Try to establish radio contact if your PASS signal goes unheeded.	3 Describing your locations as accurately as possible		
4 Shout for help or bang on something to attract attention if your PASS signal brings no response and you cannot establish radio contact.	4 a. Loudly		
	NOTE: The SCBA facepiece makes it difficult to shout loudly, but the facepiece should not be removed. Shouting also uses up oxygen faster than normal speech. Unless you know that other firefighters are very near, reserve shouting for a last resort.		

USE A HYDRAULIC SPREADER

Introduction The following job steps provide general procedures for operating a hydraulic spreader. Be thoroughly familiar with the tool, its operating principles, methods, and limitations. *ALWAYS read and follow the manufacturer's directions and cautions before powering or operating a tool.*
CAUTION: Before powering or operating the following tool, you **MUST** be dressed in full protective clothing and wearing safety goggles under your lowered faceshield.

Equipment and Personnel Two firefighters (one to operate the spreader and one to operate a hand-operated hydraulic pump if used) in full protective clothing and helmets with faceshields
 Safety goggles
 Vehicle-mounted, portable motor-driven, or hand-operated hydraulic pump
 Hydraulic spreader
 Wrecked automobile(s) or other object(s) appropriate for skill demonstration

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
-----------	------------	------	------

PROCEDURE FOR POWERING SPREADER WITH AUTOMATIC HYDRAULIC PUMP

1 Check the condition of the hydraulic hoses and components.	1 a. Gaskets in good condition or replaced as necessary		
	b. Hoses undamaged in any way		
2 Position the hydraulic pump.	2 a. Outside work area		
	b. Within reach of spreader's hydraulic hoses		
	c. Close enough to permit work to be accomplished without stretching hoses.		
3 Adjust your protective clothing.	3 a. Safety goggles on		
	b. Faceshield lowered		
	c. Gloves on		
4 Connect the spreader's hydraulic hoses to the power source.	4 a. To outlets on hydraulic pump		
	b. Snug connections		
5 Pick up the spreader	5 a. One hand on each arm handle or one hand on arm handle and one on top bar grip		
	b. Hydraulic lines over shoulder or to side and behind you		
6 Operate the button on top of the spreader to close the spreader	6 a. In "close" direction		
	With thumb (both hands on spreader handles)		
	c. Until arms are fully closed		
7 Insert the arms into the object to be spread or compressed. CAUTION: Keep both hands on spreader handles and away from work to avoid crushing injury.	7 a. Tips only		
	b. At proper angle for desired effect		
8 Operate button on top of spreader to open the spreader	8 a. In "open" direction		
	b. With thumb (both hands on spreader handles)		
	c. Until desired compression or separation is achieved		

Job Steps	Key Points	PASS	FAIL
9 Close the spreader arms.	9 Per Step 6		
10 Remove the spreader from the work			
11 Disconnect the spreader from its power source	11 Per manufacturer's instructions		
12 Return the tool to proper storage.	12 a. Hydraulic hoses connected		
	b. Per manufacturer's instructions and department protocol		
PROCEDURE FOR POWERING SPREADER WITH MANUAL HYDRAULIC PUMP (OPERATED BY SECOND FIREFIGHTER)			
Note: It is recommended that a manually operated hydraulic pump be used only if an automatic pump is not available.			
1 (Spreader Operator) Check the condition of the spreader's hydraulic hoses and components.	1 a. Gaskets in good condition or replaced as necessary		
	b. Hoses undamaged in any way		
2 (Pump Operator) Position the hydraulic pump.	2 a. Inside work area		
	b. Out of way of spreader operator		
	c. Within reach of hydraulic lines		
	d. Close enough to permit work to be accomplished without stretching hoses.		
3 (Both Firefighters) Adjust your protective clothing	3 a. Safety goggles on		
	b. Faceshield lowered		
	c. Gloves on		
4 (Spreader Operator) Connect the spreader's hydraulic hoses to power source. 5 Pick up the spreader	4 a. To outlets on hydraulic pump		
	b. Snug connections		
	5 a. One hand on each arm handle or one hand on arm handle and one on top bar grip		
	b. Hydraulic lines over shoulder or to side and behind you		
6 (Pump Operator) Turn the base lever on the hydraulic pump. 7 Pump the hydraulic pump lever to close the spreader arms.	6 Counterclockwise		
	7 a. Up and down		
	b. Until spreader operator signals that arms are fully closed		
8 (Spreader Operator) Insert spreader arms into object to be spread or compressed. CAUTION: Keep both hands on spreader handles and away from work to avoid crushing injury.	8 a. Tips only		
	b. At proper angle for desired effect		
9 (Pump Operator) Turn the base lever on the hydraulic pump. 10 Pump the hydraulic pump lever to open the spreader arms.	9 Clockwise		
	10 a. Up and down		
	b. Until spreader operator signals that desired compression or separation is achieved		
11 Repeat Steps 6 through 10.	11 Until desired cuts have been made		
12 Close the spreader arms.	12 Per Steps 6 and 7		
13 (Spreader Operator) Remove the spreader from the work.			

USE HYDRAULIC SHEARS

Introduction The following job steps provide general procedures for operating a hydraulic shears. Be thoroughly familiar with the tool, its operating principles, methods, and limitations. *ALWAYS read and follow the manufacturer's directions and cautions before powering or operating a tool.*
CAUTION: Before powering or operating the following tool, you **MUST** be dressed in full protective clothing and wearing safety goggles under your lowered faceshield.

Equipment and Personnel Two firefighters (one to operate the shears and one to operate a hand-operated hydraulic pump if used) in full protective clothing and helmets with faceshields
 Safety goggles
 Vehicle-mounted, portable motor-driven, or hand-operated hydraulic pump
 Hydraulic shears
 Wrecked automobile(s) or other object(s) appropriate for skill demonstration

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
PROCEDURE FOR POWERING SHEARS WITH AUTOMATIC HYDRAULIC PUMP			
1 (Shears Operator) Check the condition of the hydraulic hoses and components.	1 a. Gaskets in good condition or replaced as necessary b. Hoses undamaged in any way		
2 (Pump Operator) Position the hydraulic pump.	2 a. Outside work area b. Within reach of shears' hydraulic hoses c. Close enough to permit work to be accomplished without stretching hoses.		
3 (Both Firefighters) Adjust your protective clothing.	3 a. Safety goggles on b. Faceshield lowered c. Gloves on		
4 (Shears Operator) Connect the shears' hydraulic hoses to the power source.	4 a. To outlets on hydraulic pump b. Snug connections		
5 Pick up the shears	5 a. One hand on handle arm b. Other hand on top bar grip c. Hydraulic lines over shoulder or to side and behind you		
6 (Pump Operator) Operate the button on top of the shears to open the shears.	6 a. In "open" direction b. With thumb (both hands on handles) c. Until blades are fully open		
7 Grasp the work to be cut with the shear blades CAUTION: Keep both hands on shear handles and away from work to avoid cutting/crushing injury.	7 a. Work well back in blades b. At proper angle for desired cut		
8 (Shears Operator) Operate the button on top of the shears to close the shears.	8 a. In "close" direction With thumb (both hands on shear handles) b. handles) c. Until desired cut is made		
9 (Pump Operator) Repeat Steps 6 through 8.	9 To make additional cuts as necessary		
10 Remove the shears from the work.			

Job Steps	Key Points	PASS	FAIL
11 Close the shear blades	11 Per Step 8		
12 (Shears Operator) Disconnect the shears from their power source.	12 Per manufacturer's instructions		
13 Return the tool to proper storage.	13 a. Hydraulic hoses connected b. Per manufacturer's instructions and department protocol		
PROCEDURE FOR POWERING SHEARS WITH MANUALLY OPERATED HYDRAULIC PUMP			
Note: It is recommended that a manually operated hydraulic pump be used only if an automatic pump is not available.			
1 (Shears Operator) Check the condition of the shears' hydraulic hoses and components.	1 a. Gaskets in good condition or replaced as necessary b. Hoses undamaged in any way		
2 (Pump Operator) Position the hydraulic pump.	2 a. Inside work area b. Out of way of shears operator c. Within reach of hydraulic lines d. Close enough to permit work to be accomplished without stretching hoses.		
3 (Both Firefighters) Adjust your protective clothing	3 a. Safety goggles on b. Faceshield lowered c. Gloves on		
4 (Shears Operator) Connect the shears' hydraulic hoses to power source. 5 Pick up the shears	4 a. To outlets on hydraulic pump b. Snug connections 5 a. One hand on handle arm b. Other hand on top bar grip c. Hydraulic lines over shoulder or to side and behind you		
6 (Pump Operator) Turn the base lever on the hydraulic pump. 7 Pump the hydraulic pump lever to open the shear arms.	6 Clockwise 7 a. Up and down b. Until shears operator signals that arms are fully opened		
8 (Shears Operator) Grasp the work to be cut with the shear blades. CAUTION: Keep both hands on shear handles and away from work to avoid cutting/crushing injury.	8 a. Work well back in blades b. At proper angle for desired cut		
9 (Pump Operator) Turn the base lever on the hydraulic pump. 10 Pump the hydraulic pump lever to close the blades.	9 Counterclockwise 10 a. Up and down b. Until shears operator signals that the desired cut is made		
11 Repeat Steps 6 through 10.	11 Until desired cuts have been made		
12 (Shears Operator) Remove the shears from the work. 13 Disconnect the shears from their power source. 14 Return the tool to proper storage.	13 Per manufacturer's instructions 14 a. Hydraulic hoses connected b. Per manufacturer's instructions and department protocol		

BUILDING A BOX CRIB

Introduction The following job steps provide general procedures for building a box crib.

Equipment and Personnel One or two firefighters in full protective clothing and helmets with faceshields
 Safety goggles
 Cribbing

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
-----------	------------	------	------

PROCEDURE FOR BUILDING A BOX CRIB

1 Gather cribbing to be used.	1 a. May be found on emergency vehicle carrying extrication equipment		
2 Adjust your protective clothing.	2 a. Safety goggles on		
	b. Faceshield lowered		
	c. Gloves on		
4 Build box out of cribbing overlapping only on the ends.	4 a. Build under object to be stabilized		
5 Build as high as necessary to stabilize object.	5 a. Use wedges where necessary to make contact with vehicle		

USE THE TWO-FIREFIGHTER METHOD TO COUPLE HOSE

Introduction The effective use of hoselines is the foundation of a firefighter's work. It is critical that you comprehend and perform all hose work automatically and with precision. Two people can quickly and efficiently couple hose.

Equipment Two firefighters in protective clothing
and Personnel Two lengths of hose

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
1 Position the hoses	1 Male and female couplings facing each other		
2 Position yourselves.	2 a. Holding opposite couplings b. Facing each other		
3 (Firefighter with male coupling) Cradle male coupling.	3 a. Tightly against upper thigh or midsection b. Firmly with both hands c. Hands directly behind coupling d. Hose slightly bent directly behind coupling e. Threads facing outward f. Not looking at coupling Note: Firefighter with the male coupling looks away so as not to interfere with the alignment. The hose must be aligned by the firefighter with the female coupling.		
(Firefighter with female coupling) 4 Inspect the couplings.	4 a. Gasket b. Threads c. Shape d. Obstructions		
5 Set the threads.	5 a. Holding female coupling firmly in both hands b. Bringing female coupling to male coupling c. Aligning Higbee indicator		
6 Connect the couplings.	6 a. Turning swivel clockwise with thumb b. Until hand tight		

DEMONSTRATE A BASIC STRAIGHT HOSE ROLL

Introduction The straight hose roll is generally used for hose that is going to be put in storage - especially rack storage - returned to quarters for washing, or loaded back on the apparatus at the fire scene. When the roll is completed, the female end is exposed, with the male end protected in the center of the roll.

A variation of this method is to begin the roll at the female coupling so that when the roll is completed, the male coupling is exposed. This is often done to denote a damaged coupling or piece of hose. A tag is usually attached to the male coupling indicating the type and location of the damage.

Equipment and Personnel One firefighter
 Section of hose

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
1 Lay out the hose.	1 a. On clean surface b. Flat c. Straight line d. Without twisting		
2 Position yourself for rolling.	2 At male coupling		
3 Begin the roll.	3 a. Male coupling rolled over onto hose b. Toward female end c. Forming coil open enough to allow fingers to be inserted for carrying		
4 Complete the roll.	4 a. Rolling coupling along hose toward female end. b. Keeping edges aligned c. Not rolling over female coupling		
5 Reposition roll.	5 a. When completely rolled to female coupling b. Laying on ground		
6 Align any protruding coils.	6 a. Tamping down into roll with your foot b. Gently		

DEMONSTRATE A TWO-PERSON DONUT HOSE ROLL

Introduction The donut roll has certain advantages that the straight roll does not possess. Two main advantages are that both ends are available on the outside of the roll and that the hose is less likely to spiral or kink when unrolled. Its adaption to service makes it a preferred hose roll in many instances. When a section of fire hose needs to be rolled into a donut roll, one or two firefighters may perform the task. This job sheet outlines the procedure for a two-firefighter donut roll.

Equipment Two firefighters
and Personnel Section of hose

Students Name _____

Instructors Name _____

Date _____

Job Steps	Key Points	PASS	FAIL
1 Lay out the hose.	1 a. On clean surface b. Flat c. Straight line d. Without twisting		
2 Pick up the hose.	2 By male coupling		
3 Carry the hose.	3 a. Toward female coupling		
4 Position the male coupling.	4 a. On top of hose b. 6 feet (2 m) from female coupling c. Lapped over smoothly c. Without kinks		
5 Take positions.	5 a. First firefighter at fold facing female coupling b. Second firefighter 4 to 5 feet (1.2 m to 1.5 m) in front of and facing first		
(First firefighter) 6 Start the roll.	6 a. Toward couplings b. Hand over hand c. Leaving sufficient center loop for carrying		
(Second Firefighter) 7 Remove slack and keep the hose straight	7 a. Walking backwards b. During rolling c. Not rolling over couplings		
8 Reposition the roll.	8 a. Laying flat b. On ground		
9 Complete the roll.	9 a. Bringing female end around male end b. To protect male coupling		

PERFORM A STREET DRAG

Introduction The street drag is another method for advancing hose at ground level. This method is used when personnel resources are short as it requires few firefighters. In addition, by placing the hose over both shoulders with the couplings on the chest and pulling, a dual-line drag can be used to advance two lines simultaneously.

Equipment and Personnel One firefighter in protective clothing
 One section of 2 1/2-inch (65 mm) fire hose

Students Name _____

Instructors Name _____

Date _____

Job Steps	Key Points	PASS	FAIL
1 Position the hose.	1 a. In a straight line b. Flat c. Couplings placed gently		
2 Position yourself.	2 a. At one end of hose b. To one side c. Facing direction of travel		
3 Pick up the hose.	3 a. Just behind coupling b. With hand nearest hose		
4 Advance.	4 a. Toward opposite end of hose. b. To approximate center of hose		
5 Pick up the hose.	5 a. At center point b. With free hand		
6 Place the hose over your shoulder.	6 a. Shoulder nearest hose b. Flat and untwisted		
7 Step to other side of hoseline.	7 Permitting hose to cross your chest		
8 Advance.	8 To next coupling		
9 Pick up the coupling.	9 With free hand		
10 Drag the hose.	10 a. Gripping hose just behind couplings b. 20 feet (6 m)		
11 Lay the hose down.	11 a. On ground b. Placing couplings gently		

INSPECT, CLEAN, AND DRY HOSE

Introduction The importance of reliable fire hose is sometimes not fully appreciated, and hose that has been neglected is more likely to fail when operated than hose that has been maintained in peak condition. Undependable hose can also be responsible for serious injury to firefighters and others. The techniques for washing and drying fire hose and the provisions for storage are very important functions.

Equipment and Personnel

- One firefighter
- Stiff-bristled scrub brushes
- Broom
- Wire brush
- Warm water and mild soap or detergent solution
- Charged booster hose/nozzle
- Used hose to be cleaned
- Hose machine detergent recommended by manufacturer
- Cabinet-type hose machine
- Hose drying tower, rack, or cabinet

Students Name _____

Instructors Name _____

Date _____

Job Steps	Key Points	PASS	FAIL
-----------	------------	------	------

HAND CLEANING

1 Clean the coupling swivels.	1 a. Submerging in warm, soapy water		
	b. Working forward and backward		
	c. Until free of dirt and other foreign matter		
2 Clean the male threads.	2 a. With stiff-bristled scrub brush or wire brush		
	b. Until free of clogged tar, asphalt, or other foreign material		
3 Inspect hose couplings.			
4 Brush the length of the hose.	4 a. With broom		
	b. Until free of accumulated dust and dirt		
5 Wash areas of the hose that contain dirt not removed by brushing.	5 With booster hose and clear water		
6 Scrub the hose.	6 a. Areas that have been exposed to oil or grease		
	b. With scrub brush and mild soap or detergent		
	c. Until all oil or grease is removed		
7 Rinse the hose.	7 a. Thoroughly		
	b. With clear water from booster hose		
8 Inspect the hose.	8 a. For any remaining grease or oil stains		
	b. For frayed, snagged, or worn areas		

Job Steps	Key Points	PASS	FAIL
9 Dry the hose.	9 a. Out of the sun b. Using one of the following methods: Hanging in hose tower Placing on drying rack Placing in hose dryer cabinet Note: If drying the hose in a hose drying cabinet, set the thermostat to the drying temperature recommended by the cabinet manufacturer.		
10 Roll and store the hose.	10 a. After it has dried b. Per department SOP		

USING HOSE WASHING MACHINE

1 Clean the coupling swivels.	1 a. Submerging in warm, soapy water b. Working forward and backward c. Until free of dirt and other foreign matter		
2 Clean the male threads.	2 a. With stiff-bristled scrub brush or wire brush b. Until free of clogged tar, asphalt, or other foreign material		
3 Inspect hose couplings.			
4 Connect the hose washing machine supply line.	4 a. To pumper or hydrant b. Per manufacturer's instructions		
5 Place dirty hose in hose bin.	5 a. Rolled b. Per manufacturer's instructions		
6 Open the front of the machine and thread the hose into the machine	6 a. Between brushes and rollers b. Per manufacturer's instructions		
7 Secure the hose.	7 a. To hose roller b. Per manufacturer's instructions		
8 Add detergent if necessary.	8 Amount and type recommended by manufacturer		
9 Turn on the machine.	9 a. First shutting front door b. Per manufacturer's instructions		
10 Inspect the hose.	10 a. When wash cycle is complete b. For any remaining grease or oil stains c. For frayed, snagged, or worn areas		
11 Dry the hose.	9 a. Out of the sun b. Using one of the following methods: By hanging in hose tower By placing in drying rack By placing in hose dryer cabinet Note: If drying the hose in a hose drying cabinet, set the thermostat to the drying temperature recommended by the cabinet manufacturer.		
10 Roll and store the hose.	10 a. After it has dried b. Per department SOP		

INSPECT HOSE COUPLINGS AND REPLACE A HOSE GASKET

Introduction Before any piece of equipment is placed on the apparatus, it should be in top operating condition. Hose couplings are vital for attaching hose to other hose and nozzles. If they or their gaskets are damaged, they can hinder the mission and endanger firefighters' lives.

Equipment and Personnel One firefighter in protective clothing
Hoses with male, female, and Storz couplings
Replacement gaskets of appropriate types and sizes

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
-----------	------------	------	------

INSPECT HOSE COUPLINGS

1 Inspect the male couplings.	1 a. Tight on hose or appliance b. Undamaged threads c. Not out of round d. Free of burrs e. Clean		
2 Inspect the female couplings.	2 a. Tight on hose or appliance b. Undamaged threads c. Not out of round d. Free of burrs e. Clean f. Free-spinning swivel g. Swivel gasket undamaged, pliable, and clean h. Swivel gasket in place		
3 Inspect the Storz couplings.	3 a. Tight on hose or appliance b. Not edged c. Free of burrs d. Clean e. Free-spinning swivel f. Swivel gasket undamaged and clean g. Swivel gasket in place h. Undamaged connecting lugs		

REPLACE A HOSE GASKET

1 Remove old or damaged gasket.	1 Discard in proper receptacle		
2 Pick up new gasket.	2 a. Between middle finger and thumb b. Index finger on inside rim		
3 Fold outer rim upward.	3 With index finger		
4 Place gasket into swivel	4 a. Large loop first b. Smoothing as necessary to seat		

ACCORDION LOAD AND UNLOAD HOSE

Introduction The accordion load places bends at each end of the hose bed, but it has an added feature of having all flares the same length. This feature is a distinct advantage in hoseline advancement. Because all of the folds in an accordion load are nearly the same length, they can be easily loaded on the shoulder by taking several folds at a time directly from the hose bed.

Equipment and Personnel Two firefighters in protective clothing
 Hose bed
 Four lengths of coupled fire hose

Students Name _____

Instructors Name _____

Date _____

Job Steps	Key Points	PASS	FAIL
-----------	------------	------	------

LOAD

1 Inspect the couplings.			
2 Position yourselves for loading.	2 One firefighter at either end of hose bed Note: If available, a third firefighter on the ground can feed the hose to the two in the bed.		
3 Start the load.	3 a. Male coupling for forward lay b. Female coupling for reverse lay		
4 Place coupling in the hose bed.	4 Any corner of bed per department SOP Note: In a split hose bed, the hose coupling is usually placed near the center hose bed divider at the rear of the apparatus, with female coupling hanging below the hose bed so that it can later be placed on top of the hose in the adjacent bed.		
5 Stand hose on edge in hose bed.	5 a. Starting at coupling b. Extending hose full length of bed		
6 Fold back (loop) the hose	6 a. When front or rear of bed is reached b. Toward opposite end of bed c. Tight fold d. Hose remaining on side, untwisted		
7 Continue until a coupling is reached.	7 a. Each succeeding fold full length of bed b. On edge c. Back and forth d. Packing tightly and neatly		
8 Stagger couplings in the hose bed to allow for easy removal of the hose.	8 a. Avoiding side-by-side couplings b. Using entire hose bed c. Couplings not interfering with folds		

Job Steps	Key Points	PASS	FAIL
9 Use a "dutchman" (a short fold or reverse bend) to position couplings for proper exit.	9 a. Per department SOP b. Changing direction of hose c. Changing location of coupling d. Coupling will pull straight out without having to turn around		
10 Continue loading hose.	10 a. Using same methods b. Until all hose is loaded c. Until hose bed complement is reached d. Until hose bed is full		

UNLOAD

1 Position yourself for unloading	1 a. Facing hose bed b. Opposite nozzle or coupling		
2 Grasp the hose.	2 a. Nozzle or coupling and number of folds needed to make up load b. With both hands		
3 Pull several folds out of bed.	3 a. As many as are needed b. About one-third out		
4 Place the hose folds on your shoulder.	4 a. In one smooth action b. Twisting folds into upright position c. Turning away from bed b. Pivoting into folds		
5 Adjust the load as necessary	5 a. Hose is flat on shoulder b. Hose is balanced on shoulder c. Nozzle or coupling is in front of you		
6 Secure load on your shoulder.	6 a. Grasping with both hands each side b. Tightly		
7 Step away from the apparatus.	7 Pulling load completely out of bed		
8 Remove additional shoulder loads.	8 In the same manner		

FLAT LOAD AND UNLOAD HOSE

Introduction The flat load, as the name implies, consists of folding the hose back and forth on its flat sides, lengthwise in the hose compartment. The load places approximately the same number of bends in the hose as the accordion load, and it has the same added feature of having all the flares the same length.

Due to the way flat and horseshoe loads are arranged in the hose bed, it is necessary to load one section of hose at a time onto the shoulder.

Equipment and Personnel Two firefighters in protective clothing
 Hose bed
 Four lengths of coupled fire hose

Students Name _____

Instructors Name _____

Date _____

Job Steps	Key Points	PASS	FAIL
-----------	------------	------	------

LOAD

1 Inspect the couplings.			
2 Position yourselves for loading.	2 One firefighter at either end of hose bed Note: If available, a third firefighter on the ground can feed the hose to the two in the bed.		
3 Start the load.	3 a. Male coupling for forward lay b. Female coupling for reverse lay		
4 Place coupling in the hose bed.	4 Any corner of bed per department SOP Note: The hose coupling is usually placed near the center hose bed divider at the rear of the apparatus.		
5 Lay the hose in the hose bed.	5 a. Starting at coupling b. In front-to-back or back-to-front fashion c. Flat and parallel to hose bed or divider		
6 Make folds (loops).	6 a. At front and rear of hose bed b. Side by side (lengths of hose alongside each other) c. Tight d. Until tier is full		
7 Stagger couplings in the hose bed to allow for easy removal of the hose.	7 a. Avoiding side-by-side couplings b. Using entire hose bed c. Couplings not interfering with folds		
8 Use a "dutchman" (a short fold or reverse bend) to position couplings for proper exit.	8 a. Per department SOP b. Changing direction of hose c. Changing location of coupling d. Coupling will pull straight out without having to turn around		

Job Steps	Key Points	PASS	FAIL
9 Start second (and subsequent) tier.	9 a. By folding hose back to beginning side		
10 Stagger the folds of each tier.	10 a. Shortening alternate tier folds b. Approximately 4 inches (100 mm) from front and back Note: One tier full lengths, next tier 4 inches (100 mm) short front and back, next tier full lengths, and so on to permit the center of the load to fill evenly.		

UNLOAD

1 Position yourself for unloading	1 a. On ground b. Facing hose bed		
2 Remove the nozzle from the hose bed.	2 a. Pulling out and over either shoulder b. Nozzle facing down c. Midpoint of back		
3 Grasp hose for unloading.	3 a. Hand crossed over chest to hold over-shoulder hoseline b. Other arm slipped through long hose loops to shoulder c. Hand of same arm grasping short loops		
4 Unload the hose.	4 a. Pulling hose clear of bed b. Turning away from hose bed c. Walking away from apparatus d. Both hands on hoseline at nozzle shoulder.		

PERFORM A SHOULDER LOOP HOSE CARRY

Introduction The shoulder loop hose carry is one method of carrying a single section of hose. When forming the shoulder loops, the firefighter must take care not to form the loops so long that they present a tripping hazard.

Equipment One firefighter in protective clothing
and Personnel One length of 2 1/2-inch (65 mm) hose

Students Name _____

Instructors Name _____

Date _____

Job Steps	Key Points	PASS	FAIL
1 Position the hose.	1 a. In a straight line b. Flat c. Couplings placed gently		
2 Position yourself.	2 a. At one end of hose b. Facing opposite end		
3 Place the hose over your shoulder.	3 a. Coupling (or nozzle) in back b. Hanging down at waist c. Hoseline directly in front of body		
4 Form a bight in the hose.	4 a. About 3 feet (1 m) long b. On ground c. By stepping forward		
5 Loop the bight over your shoulder	5 a. In one smooth movement b. Holding hose at shoulder with one hand c. Stooping and picking up hose with other hand d. Rising and bringing hose back over shoulder e. Loop hanging just short of ground CAUTION: Do not make loops so long that you will catch your feet in them when carrying the hose.		
6 Repeat Steps 4 and 5.	6 Until length of hose is shoulder loaded		
7 Place the load on your opposite shoulder.	7 a. Grasping hose at shoulder b. Lifting flaked loop from shoulder c. Pivoting toward loop d. Inserting free arm through loop e. Settling loop on shoulder		
8 Carry the hose.	8 20 feet (6 m)		
9 Lay the hose down.	9 a. On ground b. Couplings (nozzle) placed gently		

OPERATE A FOG STREAM NOZZLE

Introduction The design of most fog nozzles permits adjustment of the fog tip to produce different stream patterns from the nozzle. In order to produce an effective fire stream with a fog nozzle, the firefighter must be able to quickly adjust the nozzle to the appropriate fog pattern and pressure for the fire situation. Although nozzle designs differ, the water pattern produced by the nozzle setting affects the ease with which the nozzle may be handled. Also, once the nozzle pressure is sufficient to produce a satisfactory reach, further increases in nozzle pressure only cause the stream to break up and be difficult to handle.

Equipment and Personnel One driver/operator
 One pumper
 Two firefighters in protective clothing, one at nozzle and one for backup
 Pump-connected hoseline equipped with adjustable gallonage fog nozzle
 Targets

Students Name _____

Instructors Name _____

Date _____

Job Steps	Key Points	PASS	FAIL
1 Position yourselves	1 a. Same side of hose b. One firefighter on nozzle; one as backup		
2 Adjust the gallonage output.	2 a. Depressing and releasing latch with thumb if applicable. b. Twisting gallonage adjustment ring c. To gpm indicated by instructor		
3 Adjust the stream pattern.	3 a. Twisting stream adjustment ring b. To a straight stream		
4 Aim the nozzle.	4 At target indicated by instructor		
5 Open the nozzle	5 a. Pushing bale fully forward, squeezing trigger, or turning shank to "open" position as applicable b. While advancing to within stream reach		
6 Hold the stream on target.	6 For 15 seconds		
7 Shut off the water flow.	7 Releasing bale or trigger, or twisting stream ring as applicable		
8 Repeat steps 2 through 7.	8 a. At different gallonage settings b. Until technique becomes comfortable and automatic		

NARROW FOG STREAM

1 Position yourselves.	1 a. Same side of hose b. One firefighter on nozzle; one as backup		
2 Adjust the gallonage output.	2 a. Depressing and releasing latch with thumb if applicable b. Twisting gallonage adjustment ring c. To gpm indicated by instructor		
3 Adjust the stream pattern.	3 a. Twisting stream adjustment ring b. To a narrow fog stream		
4 Aim the nozzle.	4 At target indicated by instructor		

Job Steps	Key Points	PASS	FAIL
5 Open the nozzle	5 a. Pushing bale fully forward, squeezing trigger, or turning shank to "open" position as applicable b. While advancing to within stream reach		
6 Hold the stream on target.	6 For 15 seconds		
7 Shut off the water flow.	7 Releasing bale or trigger or twisting the "shut off" position as applicable		
8 Repeat steps 2 through 7.	8 a. At different gallonage settings b. Until technique becomes comfortable and automatic		

WIDE FOG STREAM

1 Position yourselves.	1 a. Same side of hose b. One firefighter on nozzle; one as backup		
2 Adjust the gallonage output.	2 a. Depressing and releasing latch with thumb if applicable b. Twisting gallonage adjustment ring c. To gpm indicated by instructor		
3 Adjust the stream pattern.	3 a. Twisting stream adjustment ring b. To a wide fog stream		
4 Aim the nozzle.	4 At target indicated by instructor		
5 Open the nozzle	5 a. Pushing bale fully forward, squeezing trigger, or turning shank to "open" position as applicable b. While advancing to within stream reach		
6 Hold the stream on target.	6 For 15 seconds		
7 Shut off the water flow.	7 Releasing bale or trigger or twisting the "shut off" position as applicable		
8 Repeat steps 2 through 7.	8 a. At different gallonage settings b. Until technique becomes comfortable and automatic		

OPERATE A SOLID STREAM NOZZLE

Introduction A solid stream is produced from a fixed orifice, smoothbore nozzle; therefore, the stream pattern cannot be adjusted. Pressure is adjusted at the pumper. For handlines, pressure should be 50 psi (350 kPa), plus adjustment for friction loss; for master stream devices, pressure should be 80 psi (560 kPa), plus adjustment for friction loss.

The solid stream nozzle is designed to produce a stream as compact as possible, with little shower or spray. This type of stream is capable of reaching areas that might not be reached by other streams. Solid streams also minimize the steam burn hazard associated with fog streams.

Equipment and Personnel One driver/operator
 One pumper
 Two firefighters in protective clothing, one at nozzle and one for backup
 Pump-connected hoseline equipped with adjustable gallonage fog nozzle
 Targets

Students Name _____

Instructors Name _____

Date _____

Job Steps	Key Points	PASS	FAIL
1 Position yourselves	1 a. Same side of hose b. One firefighter on nozzle; one as backup		
2 Aim the nozzle.	2 At target indicated by instructor		
3 Open the nozzle	3 a. Pulling bale backward b. slowly c. While advancing to within stream reach		
4 Hold the stream on target.	4 For 15 seconds		
5 Shut off the water flow.	5 a. Pushing bale forward b. Slowly		
6 Repeat steps 2 through 5.	6 a. On targets at different ranges and elevations b. Until technique becomes comfortable and automatic		

MAKE SOFT-SLEEVE HYDRANT CONNECTION

Introduction When hydrant connections are made from a reverse lay, the intake hose is soft sleeve. Soft-sleeve hose is more flexible than hard-suction hose. Because of this, soft-sleeve connections are easier to perform and require fewer personnel.

Equipment and Personnel One apparatus driver/operator
 One firefighter to make the hydrant connection
 Soft-sleeve hose
 Spanner or hydrant wrench
 Rubber mallet
 4 1/2-inch (115 mm) to 2 1/2-inch (65 mm) reducer coupling (if hydrant has only 2 1/2-inch (65 mm) outlets)

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
1 Spot the pumper.	1 a. At convenient angle to hydrant outlet b. Within limits of intake hose length c. Pump intake a few feet short of hydrant outlet		
2 Close the booster tank valve.	2 If there is no clapper between pump and tank		
3 Remove the pump intake cap.	3 a. Turning counterclockwise b. Using mallet or spanner if tight		
4 Remove necessary equipment from the pumper.	4 a. Hydrant or spanner wrench b. Reducer (if necessary) c. Rubber mallet		
5 Remove the hydrant caps.	5 a. Turning counterclockwise b. Using spanner wrench if cap is tight		
6 Inspect the hydrant.	6 a. Exterior for damage b. Inside outlet for debris or damage		
7 Place the hydrant wrench on hydrant nut.	7 Handle pointing away from outlet		
8 Place the adapter on the hydrant.	8 a. Reducer, if necessary b. Turning clockwise c. Hand tight		
9 Remove the intake hose from the pumper.			
10 Inspect the intake hose coupling.			
11 Connect the intake hose to the pump intake. Note: Some departments carry the soft-sleeve hose preconnected to the pump intake through a gated intake valve. This arrangement requires only that the soft-sleeve intake hose be stretched to the hydrant.	11 a. Turning clockwise b. Until hand tight		
12 Stretch the intake hose to the hydrant.			
13 To aid in establishing connection without kinking hose move the apparatus if necessary	13 Slightly		
14 Inspect the intake hose coupling.			

Job Steps	Key Points	PASS	FAIL
15 Make the hydrant connection.	15 a. To steamer outlet or outlet with adapter b. Turning clockwise c. hand tight		
16 Open the hydrant	16 a. Turning counterclockwise b. Slowly until hose is full c. Fully		
17 Tighten any leaking connections.	7 Using rubber mallet		

PERFORM A SINGLE SECTION DRAIN AND CARRY

Introduction It frequently becomes necessary to drain excess water from a section of fire hose and to carry it a reasonable distance. Draining the hose is one task and preparing it to be carried is another. The following technique is a way by which both tasks can be performed at the same time for an accordion shoulder carry. The hose does not necessarily need to be in a straight line but sharp bends make it difficult to load.

Equipment and Personnel One firefighter in protective clothing
One length of 2 1/2-inch (65 mm) hose

Students Name _____

Instructors Name _____

Date _____

Job Steps	Key Points	PASS	FAIL
1 Position the hose.	1 a. In a straight line b. Flat c. Couplings placed gently		
2 Position yourself.	2 a. At one end of hose b. Facing opposite end		
3 Pick up the hose.	3 a. With either hand b. Allowing water to flow forward		
4 Loop the hose over one shoulder.	4 a. Loop in back of body b. Loop knee high c. Coupling held at waist d. Coupling facing down		
5 Walk forward	5 a. Holding hose in front of body b. With both hands c. Forming additional loops d. In front and back of body e. Layering over same shoulder f. Loops knee high front and rear		
6 Continue walking forward.	6 a. To opposite end b. Until section of hose has been drained c. Until section is loaded on shoulder		
7 Adjust the load as necessary.	7 a. Hose flat on shoulder b. Hose balanced on shoulder c. Steadied with both hands in front		
8 Carry the hose.	8 20 feet (6 m)		
9 Lay the hose down.	9 a. On ground b. Couplings placed gently		

ADVANCE A LINE INTO A STRUCTURE

Introduction To effectively attack and extinguish structure fires, it is necessary for the firefighter to advance a hoseline from the apparatus into the structure and to the seat of the fire. Certain carries and advancing techniques have been developed that allow the firefighter to advance hose efficiently and rapidly.

Equipment and Personnel Four firefighters (minimum) in protective clothing
 Accordion-bedded hoseline

Students Name _____

Instructors Name _____

Date _____

Job Steps	Key Points	PASS	FAIL
1 Unload the hose.			
2 Shoulder the hose.	2 a. Horseshoe shoulder b. All placing hose on same shoulder		
3 Position yourselves for advancing.	3 a. Spaced about 12 feet (4 m) apart on same side of hose b. Facing nozzle c. About 15 feet (5 m) to 20 feet (6 m) of hose between each firefighter		
4 Advance the hose.	4 a. To building entrance b. Not entering building		
5 Feel the door.	5 a. Firefighter on nozzle b. With back of ungloved hand b. Keeping low and to side of door opposite hinges		
6 Set the desired nozzle pattern.	6 a. 30- to 60-degree pattern for indirect attack b. 30-degree pattern for direct attack c. Bleeding all air out of hoseline		
7 Start the airflow in your SCBA unit.			
8 Enter the structure.	8 a. Staying low b. Not blocking doorway c. Maintaining spacing between firefighters		

ADVANCE A LINE DOWN AN INTERIOR STAIRWAY

Introduction

Advancing a hoseline in a stairway presents several problems. Hose is difficult to drag on flat, level ground and is exceedingly difficult to drag around obstructions found on a stairway. The shoulder carry and the underarm carry are adaptable to stairway advancement because hose is carried into position and fed out as needed. The minuteman carry is also excellent for use on stairways. The advancement of an uncharged hoseline down a flight of stairs is considerably easier than advancing a charged hoseline down stairways. However, because advancing a hoseline down a stairway often subjects firefighters to intense heat, in most cases the hoseline is charged when advancing down a stairway. Advancing an uncharged hoseline down stairways is recommended only when there is no fire, or a very minor fire, present.

Equipment and Personnel Fire fighting team in full protective clothing
 1 1/2-inch (38 mm) or larger hoseline
 Structure with interior stairs

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
-----------	------------	------	------

DOWN INTERIOR STAIRS (UNCHARGED HOSELINE)

1 Position yourselves for shouldering the hoseline	1 a. Facing nozzle b. About 25 feet (8 m) to 20 feet (9 m) of hose between each firefighter		
2 Place hose bundles on shoulders.	2 a. Same shoulders b. Per appropriate shoulder carry		
3 Position stationary firefighters to help feed the hose and to keep hose on outside of staircase.	3 a. Along route and at top of stairs b. At critical points (obstructions and corners) c. Note: The last several firefighters can assume these stationary positions after their shoulder loads have payed out.		
4 Advance the hoseline down a flight of stairs.	4 a. Against outside wall b. Avoiding sharp bends and kinks c. Maintaining spacing between firefighters d. Hose paying off shoulder of last firefighter e. To fire floor		
5 (Last firefighter) Advance and assist nozzle operator	5 a. After hose supply is depleted b. Removing kinks c. Pushing hose to outside wall of stairway as necessary		

DOWN INTERIOR STAIRS (CHARGED HOSELINE)

1 Use the working drag to advance the line.			
2 Position stationary firefighters to help feed the hose and to keep hose on outside of staircase.	2 a. Along route and at top of stairs b. At critical points (obstructions and corners)		

Job Steps	Key Points	PASS	FAIL
3 Advance down the stairs.	3 a. Against outside wall b. Avoiding sharp bends and kinks c. Maintaining spacing between firefighters d. Using working drag e. To fire floor		
4 (Second firefighter) Advance and assist nozzle operator.	4 a. After all hose is advanced b. Pushing hose to outside wall of stairway		

HANDLE A MEDIUM-SIZED CHARGED HOSELINE (ONE FIREFIGHTER)

Introduction When one firefighter is required to operate a medium sized hose and nozzle, some means must be provided for bracing and anchoring the hoseline.

Equipment and Personnel One firefighter in protective clothing
Charged 1 1/2-inch (38 mm) hoseline

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
1 Grasp the hose nozzle.	1 With one hand		
2 Grasp the hose.	2 a. With free hand b. Just behind nozzle		
3 Step forward	3 a. In direction in which stream is to be projected b. Straightening the hoseline c. Until at least 10 feet (3 m) of hose behind the nozzle is straight		
4 Position hose for operation.	4 a. Nozzle pointing in desired direction b. Hose cradled against inside of closest leg c. Hose braced against front of body and hip d. Foot of supporting leg on hose		
5 Operate the hose.	5 Opening nozzle slowly to reduce the effect of nozzle reaction		

HANDLE A MEDIUM-SIZED CHARGED HOSELINE (TWO FIREFIGHTERS)

Introduction A hoseline and nozzle must be kept under control at all times. The two-person method of handling a nozzle should be used whenever possible. It provided a greater degree of safety to the firefighters, is less fatiguing, and allows for mobility and speed of attack.

Equipment and Personnel Two firefighters in protective clothing
Charged 1 1/2-inch (38 mm) hoseline
Rope hose tool or hose strap

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
1 Position yourselves	1 a. On same side of hose b. Facing nozzle		
(Nozzle firefighter) 2 Pick up the nozzle.	2 a. One hand grasping nozzle b. One hand, palm up, grasping hose just behind nozzle c. Lifting with legs, not back		
3 Position the hose and nozzle	3 a. Hose close to body, under arm b. Supporting hose with hose tool or utility strap if available c. Keeping feet spread apart for balance d. Nozzle hand on bale of nozzle		
4 (Backup firefighter) Pick up the hose.	4 a. About 3 feet (1 m) behind firefighter on nozzle b. On same side of hose c. Grasping hose forward, palm down; other hand palm up d. Resting hose against waist and across hip e. Hose held at waist height f. Supporting hose with hose tool or utility strap if available g. Hose straight behind nozzle firefighter h. Feet spread apart for balance		
5 (Firefighter on nozzle) Operate the nozzle.	5 Opening nozzle slowly to reduce the effect of nozzle reaction		

HANDLE A LARGE-SIZED CHARGED HOSELINE (TWO FIREFIGHTERS)

Introduction Advancing large, charged hoselines to the fire must be done in such a manner that movement is fast, coordinated, and safe. Both firefighters must know the requirements of the job and must work together as a team. One firefighter controls the nozzle, and the second firefighter serves as an anchor. Close teamwork is a must.

Equipment and Personnel Two firefighters in protective clothing
Charged 2 1/2-inch (65 mm) or larger hoseline
Rope hose tools or utility strap

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
-----------	------------	------	------

KNEELING ANCHOR METHOD

1 Position yourselves	1 a. On same side of hose b. Facing nozzle		
(Nozzle firefighter)			
2 Pick up the nozzle.	2 a. One hand grasping nozzle b. One hand, palm up, grasping hose just behind nozzle c. Lifting with legs, not back		
3 Position the hose and nozzle	3 a. Hose close to body, under arm b. Supporting hose with hose tool or utility strap if available c. Keeping feet spread apart for balance d. Nozzle hand on bale of nozzle		
4 (Backup firefighter) Kneel on the hose.	4 a. About 3 feet (1 m) from firefighter on nozzle b. With knee closest to hose c. Both hands, palm down, on hoseline near other knee		
5 (Firefighter on nozzle) Operate the nozzle	5 a. Opening nozzle slowly to reduce the effect of nozzle reaction b. Closing nozzle slowly to prevent water hammer		

ROPE HOSE TOOL OR UTILITY STRAP ANCHOR METHOD

1 Position yourselves.	1 a. On same side of hose b. Facing nozzle		
(Firefighter on nozzle)			
2 Position the rope hose tool or utility strap.	2 a. Looping around hose b. Short distance from nozzle		
3 Pick up the hose nozzle.	3 a. One hand grasping nozzle b. Other hand, palm up, grasping hose just behind nozzle c. Lifting with legs, not back		
4 Position the hoseline	4 a. Placing hose tool loop across back and over outside shoulder b. Resting hose against body c. At hip level		

Job Steps	Key Points	PASS	FAIL
(Backup Firefighter 5 Position yourself on the hoseline to serve as anchor 6 Position rope hose tool or utility strap.	5 a. Same side of hose b. Behind firefighter on nozzle c. Feet apart for balance 6 a. Looping around hose b. About 3 feet (1 m) from firefighter on nozzle c. Placing large loop across back and over outside shoulder		
7 (Firefighter on nozzle) Operate the nozzle	7 a. Opening slowly to reduce the effect of nozzle reaction b. Both firefighters leaning slightly forward for control		

USE COMBINATION ATTACK TO CONTROL AND/OR SIMULATE EXTINGUISHMENT OF A CLASS A FIRE WITHIN A STRUCTURE

Introduction The combination attack method uses the steam-generating technique of ceiling level attack combined with a direct attack on materials burning near floor level.

Any fire attack must be coordinated to be successful. Coordination is not only crucial among the crews performing different functions, such as rescue, ventilation, and suppression, but it is also essential among the members of each team. Each team member should know his or her role in the attack and suppression effort.

Equipment and Personnel At least three firefighters per attack line, dressed in full protective clothing and SCBA
 Class A fire, fueled, set up, and monitored according to NFPA 1403
 One 1 1/2 -inch (38 mm) or larger charged attack line equipped with a fog nozzle
 One 1 1/2-inch (38 mm) or larger charged backup line supplied for a second water source
 Portable light
 Axe
 Prying tool

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
1 Start your SCBA airflow.	1 All members of team CAUTION: A safety officer will check your gear before you enter the structure. Make sure that no skin or hair is exposed!		
2 Position yourselves.	2 a. On same side of attack line b. Nozzle firefighter in foremost position c. At entrance but out of doorway d. Carrying equipment needed to force entry or perform other tasks		
3 (Firefighter on nozzle) Set the nozzle flow.	3 a. For a 30-degree fog pattern b. For 125 gallonage if applicable		
4 Open the nozzle.	4 a. Fully b. Briefly c. Aiming stream to side d. Testing fog pattern e. Expelling air		
5 Extinguish burning fascia, boxed cornices, or other doorway overhangs.	5 As necessary before entering		
6 (Team) Advance the hose into the structure.	6 a. At signal from firefighter on nozzle b. All firefighters on same side of hose c. Keeping low d. Leaving one firefighter at each 90-degree turn to assist in advancing hose e. Not bunching up behind firefighter on nozzle f. Watching for hazardous conditions g. Approaching fire from unburned side h. Not opening nozzle until fire is encountered		

Job Steps	Key Points	PASS	FAIL
7 (Firefighter on nozzle) Use the "T," "Z," or "O" pattern attack.	7 a. When you have reached your objective b. Directing stream at ceiling level and then dropping down to attack the combustibles burning near the floor c. Nozzle fully open d. Until fire is darkened down		
8 (Team member) Open a designated window to enable hydraulic ventilation.	8 At instructor's command		
9 (Firefighter on nozzle) Force ventilate.	9 a. Standing approximately 2 feet (0.62 m) from window b. Aiming stream through open window c. Adjusting nozzle pattern as necessary to fill 85 to 90 percent of window opening d. Holding stream steady e. Until fire area is cleared of smoke		
10 Extinguish hot spots.	10 a. Direct attack at still flaming or glowing areas b. Short bursts c. Until no hot spots rekindle		
11 (Team) Exit the fire building.	11 a. Backing away from fire area with shuffle step b. Remaining low c. Taking up slack hose to prevent tripping or falling d. Nozzles ready until all team members are out of fire area.		
12 Stop SCBA airflow and doff SCBA masks.	12 When well clear of building		

DEMONSTRATE THE LOW-SHOULDER ROOF LADDER LIFT AND CARRY (FROM VERTICAL OR FLAT RACKING)

Introduction

The low-shoulder roof ladder carry is particularly well suited for making beam raises and for carrying a roof ladder when it is to be taken up another ladder.

Equipment One firefighter
and Personnel Vertically and flat racked 12-foot to 20-foot (4 m to 6 m) roof ladders

Students Name _____

Instructors Name _____

Date _____

Job Steps	Key Points	PASS	FAIL
-----------	------------	------	------

VERTICALLY RACKED/SIDE REMOVAL

1 Release the ladder locks.			
2 Position yourself at the lifting point.	2 a. Balance point b. Near center of ladder		
3 Position yourself for lifting.	3 a. Facing ladder butt b. Palm of the hand nearest ladder under bottom beam. c. Palm of other hand on top of upper beam		
4 Position the ladder for carrying.	4 a. Lifted clear of brackets b. Lower beam resting on shoulder c. Butt lowered slightly		
5 Steady the ladder.	5 a. Holding upper beam b. With one hand c. Palm down		
6 Carry the ladder.	6 20 feet (6 m)		
7 Return the ladder to its rack.	7 a. Seated securely on brackets b. Ladder locks engaged.		

VERTICALLY RACKED/REAR REMOVAL

1 Release the ladder locks.			
2 Position yourself for unracking the ladder.	2 a. At rear of apparatus b. Facing ladder to be removed		
3 Grasp the ladder.	3 a. By end rung b. With both hands		
4 Pull the ladder from the rack.	4 Just until ladder remains extended without support		
5 Position yourself for carrying	5 a. Facing ladder at midpoint b. Grasping top and bottom beams c. Lifting ladder to shoulder while pivoting toward ladder butt		
6 Position ladder for carrying.	6 a. Lower beam resting on shoulder b. Butt lowered slightly c. Steadied with one hand palm down on top beam and other on bottom beam or convenient rung at point near bottom beam d. Hooks closed		
7 Carry the ladder.	7 20 feet (6 m)		
8 Return the ladder to its rack.	8 a. Reversing unracking procedure b. Ladder locks engaged.		

Job Steps	Key Points	PASS	FAIL
FLAT RACKED/SIDE REMOVAL			
1 Release the ladder locks.			
2 Position yourself for unracking.	2 a. Alongside apparatus b. Facing midpoint of ladder		
3 Grasp the ladder.	3 a. By near beam b. With both hands		
4 Pull the ladder from the rack.	4 a. Straight outward b. Until near beam tilts downward		
5 Turn toward the ladder butt.	5 Pulling ladder onto shoulder		
6 Reposition ladder on shoulder.	6 Tilted up until vertical on shoulder		
7 Adjust your hand grip.	7 a. Near hand palm up grasping lower beam b. Top hand palm down grasping top beam or high up on convenient rung directly above head		
8 Position ladder for carrying	8 a. Lower beam resting on shoulder b. Butt lowered slightly c. Steadied with both hands d. Hooks closed		
9 Carry the ladder	9 20 feet (6 m)		
10 Return the ladder to its rack.	10 a. Reversing unracking procedure b. Ladder locks engaged.		
FLAT RACKED/REAR REMOVAL			
1 Release the ladder locks.			
2 Position yourself for unracking the ladder.	2 a. At rear of apparatus b. Facing ladder to be removed		
3 Grasp the ladder.	3 a. By end rung b. With both hands		
4 Pull the ladder from the rack.	4 a. Just until ladder remains extended without support		
5 Reposition yourself for carrying.	5 a. Facing ladder at midpoint b. Grasping two convenient rungs c. Lifting ladder to shoulder while pivoting toward ladder butt		
6 Position ladder for carrying	6 a. Lower beam resting on shoulder b. Butt lowered slightly c. Steadied with both hands d. Hooks closed		
7 Carry the ladder.	7 20 feet (6 m)		
8 Return the ladder to its rack.	8 a. Reversing unracking procedure b. Ladder locks engaged.		

DEMONSTRATE THE TWO-FIREFIGHTER FLAT RAISE FROM A LOW-SHOULDER CARRY

Introduction Whether a ladder is raised parallel with or perpendicular to a building makes little difference. If raised parallel with the building, the ladder can always be pivoted after it is in the vertical position. Whenever two or more firefighters are involved in raising a ladder, the firefighter at the butt is responsible for placing the butt at a desired distance from the building and determining whether the ladder will be raised parallel with or perpendicular to the building.

When there are enough personnel for a three - or four-firefighter ladder raise, the flat raise is normally used. Four firefighters are desirable because they can more easily handle larger and heavier extension ladders.

The four-firefighter flat raise is similar to the two-firefighter flat raise except for the positioning of personnel.

Equipment 30-foot (9.3 m) extension ladder
and Personnel Two firefighters

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
1 Lift and carry the ladder.	1 To work area		
2 Visually inspect the work area.	2 a. Terrain for solid, level footing b. Overhead for electrical wires and obstructions		
3 (Firefighter at butt) Lower the ladder butt to the ground.	3 Nonshoulder beam first		
4 Pivot the ladder.	4 (Firefighter at butt) a. Until flat b. Fly toward ground (Firefighter at tip) c. Simultaneously adjusting position d. Placing one beam on shoulder		
5 (Firefighter at butt) Heel the ladder.	5 a. Standing on bottom rung b. Crouching down and grasping beams or convenient rung with both hands c. Leaning back		
6 (Firefighter at tip) Position yourself to raise the ladder.	6 a. Swinging under ladder b. Grasping a convenient rung		
7 Bring the ladder upright.	7 a. Until ladder is vertical b. Until standing facing each other through the ladder (Firefighter at tip) c. Advancing hand-over-hand d. Toward the butt (Firefighter at butt) e. Advancing hand-over-hand f. Toward tip		
8 (Outside firefighter) Steady the ladder	8 a. One foot against beam b. Hands on beam		

Job Steps	Key Points	PASS	FAIL
9 (Inside firefighter) Extend the fly section	9 a. To desired elevation b. Using hand-over-hand motion on halyard c. Pulling halyard straight down d. Maintaining ladder balance		
10 Engage the ladder locks.	10 At desired elevation		
11 Lower the ladder to the building.	11 a. Carefully and firmly (Outside firefighter) b. One foot on bottom rung c. Beams grasped at shoulder height (Inside firefighter) d. Beams grasped above head		
12 Tie off the halyard.	12 a. Wrapping around two convenient rungs b. Tying clove hitch c. Tying half hitch on top of clove hitch		
13 (Both firefighters) Pull the ladder butt out from the building	13 a. Pushing against upper rung b. Pulling lower rung c. Until at proper angle for climbing		
14 Secure the ladder for climbing.			
15 Lower the ladder.	15 Reversing raising procedure		

DEMONSTRATE THE ONE-FIREFIGHTER LADDER RAISE FROM A LOW-SHOULDER CARRY

Introduction The major difference between a one-firefighter raise from the low-shoulder carry and a one-firefighter raise from the high-shoulder carry is the placement of the ladder butt. In these raises, the building is used to heel the ladder to prevent the butt from slipping while the ladder is brought to a vertical position.

Equipment 24-foot (7 m) extension ladder
and Personnel One firefighter

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
1 Lift and carry the ladder.	1 To work area		
2 Visually inspect the work area.	2 a. Terrain for solid, level footing b. Overhead for electrical wires and obstructions		
3 Lower the ladder butt to the ground	3 a. Butt spurs against building wall b. Fly in		
4 Position yourself to raise the ladder.	4 a. Grasping rung in front of your shoulder with free hand b. Removing other arm from between the rungs c. Stepping beneath ladder and grasping convenient rung with free hand		
5 Bring the ladder upright.	5 a. Advancing hand-over-hand b. Toward the butt c. Until ladder is against building		
6 Move ladder butt out from the building.	6 a. While pushing against an upper rung to keep ladder against building b. Grasping a lower rung c. Carefully to desired angle		
7 Pull the ladder away from the building.	7 a. Grasping a convenient rung with both hands b. Heeling ladder c. Until in vertical position		
8 Balance ladder in a vertical position.	8 a. One foot at butt of one beam b. Ladder steadied with instep, knee, and leg		
9 Extend the fly section.	9 a. To desired elevation b. Using hand-over-hand motion on halyard c. Pulling halyard straight down d. Maintaining ladder balance		
10 Engage the ladder locks	10 At desired elevation		
11 Lower the ladder against the building.	11 a. Grasping beams b. One foot against a butt spur or on bottom rung c. Gently		

Job Steps	Key Points	PASS	FAIL
12 Tie off the halyard.	12 a. Wrapping around two convenient rungs		
	b. Tying clove hitch		
	c. Tying half hitch on top of clove hitch		
13 Roll the ladder laterally.	13 a. Beam-over-beam		
	b. Until fly is out		
14 Pull the ladder butt out from the building.	14 a. Pushing against upper rung		
	b. Pulling lower rung		
	c. Until a proper angle for climbing		
15 Secure the ladder for climbing.			
16 Lower the ladder	16 Reversing raising procedure		

SECURE A RAISED LADDER

Introduction Ladders must be kept from slipping whenever firefighters climb them, especially if the ladder is at a lower-than-desirable angle or if there are strong winds or icy or unstable ground. Added stability is also necessary when operating hoselines from the ladder or when using the ladder for rescue.

Whenever possible, the ladder should be tied at both the top and bottom to a secure object. Tying prevents the ladder from slipping or falling away from the building and frees personnel who would otherwise heel the ladder.

Also, before an extension ladder is climbed, the excess halyard should be tied to the ladder to prevent the fly from slipping and to prevent persons from tripping over it.

Equipment and Personnel Raised extension or straight ladder
Rope hose tool or safety strap
One firefighter

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
-----------	------------	------	------

TYING THE HALYARD

1 Wrap the excess halyard.	1 a. Around two convenient rungs b. Pulled taut		
2 Grasp the halyard.	2 a. Between thumb and forefinger b. Palm down		
3 Tie a clove hitch	3 a. Palm turned up b. Halyard underneath and back over top of rung c. Pulled through loop		
4 Tie an overhand safety knot.	4 On top of clove hitch		

UNDER-LADDER HEEL

1 Adjust your faceshield.	1 Faceshield lowered		
2 Position yourself for heeling the ladder.	2 a. Standing under ladder b. Feet about shoulder width apart		
3 Grasp the ladder.	3 a. Beams, not rungs b. About eye level		
4 Pull the ladder.	4 a. Firmly b. Toward building c. Not looking up d. Until firefighter(s) has ascended or descended		

BEFORE-LADDER HEEL

1 Position yourself for heeling the ladder.	1 a. In front of ladder b. Toes of one foot against ladder heel, or one foot on bottom rung		
2 Grasp the ladder.	2 a. Beams, not rungs b. About eye level		
3 Push the ladder	3 a. Firmly b. Toward building c. Staying alert for descending firefighters		

Job Steps	Key Points	PASS	FAIL
TYING IN			
1 Tie the rope hose tool or safety strap to an appropriate ladder rung.	1 With clove hitch		
2 Secure the rope hose tool or safety strap.	2 a. Hooking, or tying securely with clove hitch		
	b. To any available secure object		

DEMONSTRATE THE TWO-FIREFIGHTER LOW-SHOULDER LADDER LIFT AND CARRY (FROM VERTICAL RACKING)

Introduction Lifting is easiest when ladders are vertically racked a little above shoulder height, and the firefighter does not need to exert as much energy or caution against back strain as when lifting from the ground or a lower racking.

Equipment and Personnel Two Firefighters
Vertically racked 24-foot (7 m) extension ladder

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
-----------	------------	------	------

SIDE REMOVAL

1 Release the ladder locks.			
2 Position yourselves at lifting points	2 a. Facing ladder b. One firefighter two or three rungs from tip c. Other firefighter two or three rungs from butt d. Both hands on convenient rungs.		
3 Lift the ladder from its brackets.	3 a. Up and out b. With both hands		
4 Position yourselves for carrying	4 a. As soon as ladder clears rack b. Continuing to grasp with hand nearest butt c. Placing other arm between two convenient rungs d. Pivoting simultaneously toward butt		
5 Position ladder for carrying.	5 a. Upper beam on shoulders b. Firefighter at butt covering upper butt spur with outside hand		
6 Carry the ladder.	6 a. 20 feet (6 m) b. Firefighter at butt clearing the way Note: The forward firefighter is responsible for using one hand to move people out of the way to prevent them from being struck by the butt spur.		
7 Return the ladder to its rack.	7 a. Reversing unranking procedure b. Seating ladder securely on brackets c. Engaging ladder locks		

REAR REMOVAL

1 Release the ladder locks.			
2 Position yourselves to unrack the ladder	2 a. At rear of apparatus b. First firefighter opposite end of ladder c. Second firefighter to one side of ladder adjacent to apparatus		
3 Pull the ladder from its rack.	3 a. First firefighter grasping end rung b. Second firefighter assisting c. Straight back b. Until second firefighter signals to stop (when ladder is just ready to clear rack)		

Job Steps	Key Points	PASS	FAIL
4 (First firefighter) Shift your position	4 a. Adjacent to butt on same side as second firefighter		
	b. Between last two rungs		
	c. Maintaining ladder support		
5 Position yourselves to carry the ladder	5 a. Facing ladder butt		
	b. Simultaneously placing arm closest to ladder between last two rungs at tip and butt		
6 Position ladder for carrying.	6 a. Pulled off rack		
	b. Upper beam on shoulders		
	c. Firefighter at butt covering upper butt spur with outside hand		
7 Carry the ladder.	7 a. 20 feet (6 m)		
	b. Firefighter at butt clearing the way		
	Note: The forward firefighter is responsible for using one hand to move people out of the way to prevent them from being struck by the butt spur		
8 Return the ladder to its rack.	8 a. Reversing unracking procedure		
	b. Engaging ladder locks		

PROPERLY BREAK ORDINARY PLATE GLASS

Introduction Because of its keen cutting edges, the ordinary plate glass in doors and windows must be broken according to an established procedure to assure firefighter safety. Impact on plate glass produces many long, pointed shards with sharp edges. Proper breaking procedures permit the broken shards of glass to fall downward, away from the firefighter's hands and to the side of where the firefighter stands.

CAUTION: Never break glass with your hands, gloved or ungloved. Also, take special care when breaking ordinary plate glass above the ground floor to prevent a "flying guillotine" hazard to citizens and firefighters below.

Equipment and Personnel One firefighter in full protective clothing
Plate glass door or window panel
Axe or other appropriate forcible entry tool

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
1 Adjust your protective gear.	1 a. Lowered faceshield		
	b. Gloves donned		
2 Position yourself	2 Windward side of glass		
3 Strike the glass	3 a. Top of pane		
	b. With forcible entry tool		
	c. Hands well above point of impact		
4 Remove the remaining glass from the frame.	4 a. Forcible entry tool run around frame		
	b. All shards removed from frame		

USE AN ELECTRIC OR GASOLINE-POWERED CIRCULAR SAW

Introduction The following job steps provide general procedures for operating an electric or gasoline-powered circular saw. Be thoroughly familiar with the tool, its operating principles, methods, and limitations. *ALWAYS read and follow the manufacturer's directions and cautions before powering or operating a tool.*

CAUTION: Before powering or operating the following tool, you **MUST** be dressed in full protective clothing and wearing safety goggles under your lowered faceshield.

Equipment and Personnel One firefighter in full protective clothing and helmet with faceshield
 Safety goggles
 Charged booster hose
 Electric or gasoline-powered circular saw
 Electric power source/outlet
 Wrecked automobile(s) or other object(s) appropriate for skill demonstration

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
1 Check the area in which the work is to be done. CAUTION: Contact between the blade and metal may produce sparks that will ignite flammable vapors.	1 a. No ignition hazards		
	b. No flammable vapors		
2 Check the saw blade	2 a. Correct for job		
	b. Sharp		
	c. Undamaged in any way		
3 Check the oil level	3 a. Per manufacturer's instructions		
	b. Proper weight oil added if necessary		
4 Check saw's safety features.	4 Blade and hand guards in place		
5 Cool the saw blade when using on metals	5 a. Before cutting		
	b. With a fine water mist from booster line		
6 Adjust your protective clothing.	6 a. Safety goggles on		
	b. Faceshield lowered		
	c. Gloves on		
7 Provide power to the saw.	7 a. Grounded power source (electrically powered)		
	b. Proper octane gasoline (gasoline powered)		
8 Start saw blade rotation	8 a. Blade not contacting work		
	b. (Electric) Switch in "on" position		
	c. (Gasoline) Compression button depressed (if applicable) and cord pulled per manufacturer's instructions and cautions.		

Job Steps	Key Points	PASS	FAIL
9 Make the cut(s) CAUTION: Stay alert and keep hands on saw handles and away from material being cut. Power saws can easily sever limbs and fingers.	9 a. Blade perpendicular to work		
	b. Power cord behind operator and away from blade (electrically powered)		
	c. Not forcing blade through material (blade doing the work)		
	d. Cooling blade often with fine water mist (if cutting metal)		
10 Stop the saw blade	10 a. When cut has been made		
	b. Releasing trigger		
11 (Electric) Disconnect the saw from its power source.	11 Pulling on plug, not cord		
12 (Gasoline powered) Shut off the saw engine	12 Pushing the "kill" switch		
13 Return the tool to proper storage	13 Per manufacturer's instructions and department protocol		

DEMONSTRATE HYDRAULIC VENTILATION

Introduction Hydraulic ventilation requires using a 60-degree fog pattern covering 85 to 90 percent of an opening. The fog stream is directed through a door or window to draw heat and smoke from the structure.

Equipment and Personnel Fire fighting team in full protective clothing and SCBA
Charged hoseline with fog nozzle
Smoke-filled training structure

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
1 Exhaust air from hose.	1 Opening and closing the bale briefly		
2 Set the fog nozzle pattern.	2 60 degrees		
3 Start your SCBA airflow.	3 a. Facepiece sealed b. No hair or skin showing c. Mainline valve fully opened		
4 Enter the structure.	4 a. As a hose team b. Keeping low c. Mainline valve fully opened		
5 Start water flow.	5 a. Nozzle extended through exit opening b. Nozzle bale pulled toward you		
6 Adjust the fog pattern.	6 a. Retracting nozzle b. Until maximum air movement is achieved NOTE: Maximum air movement usually occurs about 2 feet (0.6m) inside the ventilation opening		
7 Direct the fog stream.	7 a. Through opening and out of structure b. Leaving room for air movement between fog pattern and sides of opening c. Minimizing inside water flow d. Not hitting personnel with stream		
8 Stop the water flow.	8 a. After smoke has been cleared from building b. Nozzle bale pushed forward		
9 Exit the structure.	9 a. As hose team b. Keeping low NOTE: Rotate hose positions until each team member has operated the hose nozzle to perform hydraulic ventilation.		

USE AN ELECTRIC RECIPROCATING SAW

Introduction The following job steps provide general procedures for operating an electric reciprocating saw. Be thoroughly familiar with the tool, its operating principles, methods, and limitations. *ALWAYS read and follow the manufacturer's directions and cautions before powering or operating a tool.*
CAUTION: Before powering or operating the following tool, you **MUST** be dressed in full protective clothing and wearing safety goggles under your lowered faceshield.

Equipment and Personnel One firefighter in full protective clothing and helmet with faceshield
 Safety goggles
 Charged booster hose
 Electric reciprocating saw
 Electric power source/outlet
 Wrecked automobile(s) or other object(s) appropriate for skill demonstration

Students Name _____

Instructors Name _____

Date _____

Job Steps	Key Points	PASS	FAIL
1 Check the area in which the work is to be done. CAUTION: Contact between the blade and metal may produce sparks that will ignite flammable vapors.	1 a. No ignition hazards		
	b. No flammable vapors		
2 Check the saw blade	2 a. Correct for job		
	b. Sharp		
	c. Undamaged in any way		
3 Check the saw's safety features.	3 a. Foot plate in place		
	b. Power cord in good condition		
4 Adjust your protective clothing.	6 a. Safety goggles on		
	b. Faceshield lowered		
	c. Gloves on		
5 Connect the saw to its power source.	5 Grounded		
6 Pick up and position the saw.	6 a. One hand on handle grip		
	b. Other hand under saw barrel		
	c. Power cord behind you and away from blade		
7 Depress the handle-grip starter button to start the saw blade CAUTION: Stay alert and keep hands on saw handles and away from material being cut. Power saws can easily sever limbs and fingers.	7 Blade not contacting work		
8 Make the cut(s)	8 a. Blade perpendicular to work		
	b. Not forcing blade through material (blade doing the work)		
9 Release the handle-grip starter button to shut off the saw blade	9 When cut has been made		
10 Remove the saw blade from the work.	10 Without bending blade		
11 Disconnect the saw from its power source.	11 Pulling on plug, not cord		
12 Return the tool to proper storage	12 Per manufacturer's instructions and department protocol		

USE AN ELECTRIC OR GASOLINE-POWERED CHAIN SAW

Introduction The following job steps provide general procedures for operating an electric or gasoline-powered CHAIN saw. Be thoroughly familiar with the tool, its operating principles, methods, and limitations. *ALWAYS read and follow the manufacturer's directions and cautions before powering or operating a tool.*

CAUTION: Before powering or operating the following tool, you **MUST** be dressed in full protective clothing and wearing safety goggles under your lowered faceshield.

Equipment and Personnel One firefighter in full protective clothing and helmet with faceshield
 Safety goggles
 Charged booster hose
 Electric or gasoline-powered chain saw
 Electric power source/outlet
 Wrecked automobile(s) or other object(s) appropriate for skill demonstration

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
1 Check the area in which the work is to be done. CAUTION: Contact between the blade and metal may produce sparks that will ignite flammable vapors.	1 a. No ignition hazards		
	b. No flammable vapors		
2 Check the chain teeth	2 a. Correct for job		
	b. Sharp		
	c. Undamaged in any way		
3 Check the chain.	3 a. Well oiled		
	b. Tight		
	c. Undamaged in any way		
4 Check the oil level.	4 a. Per manufacturer's instructions		
	b. Proper weight oil added if necessary		
5 Check saw's safety features	5 a. Chain and hand guards in place		
	b. Chain brake functional (if applicable)		
6 Adjust your protective clothing.	6 a. Safety goggles on		
	b. Faceshield lowered		
	c. Gloves on		
7 Provide power to the saw.	7 a. Grounded power source (electrically powered)		
	b. Proper octane gasoline (gasoline powered)		
8 Start the chain rotation.	8 a. Chain not contacting work		
	b. (Electric) Trigger in "on" position		
	c. (Gasoline) Compression button depressed (if applicable) and cord pulled per manufacturer's instructions and cautions.		

Job Steps	Key Points	PASS	FAIL
9 Make the cut(s) CAUTION: Stay alert and keep hands on saw handles and away from material being cut. Power saws can easily sever limbs and fingers.	9 a. Chain at effective angle to work b. Power cord behind operator and away from blade c. Not forcing blade through material (blade doing the work)		
10 Oil chain.	10 a. Often b. Per manufacturer's directions		
11 Remove the chain from the work.	11 When cut has been made		
12 Stop the chain rotation.	12 Trigger released		
13 Set the saw down.	13 a. When chain has stopped completely b. Where it will not be a tripping hazard		
14 (Electric) Disconnect the saw from its power source.	14 Pulling on plug, not cord		
15 (Gasoline powered) Shut off the saw engine	15 Pushing the "kill" switch		
13 Return the tool to proper storage	13 Per manufacturer's instructions and department protocol		

FORCE AN OUT-SWINGING DOOR

Introduction The least damaging method for opening a door that opens away from you (out-swing door) is to remove the door's hinges and then the door. If this cannot be accomplished, however, the door must be forced.
CAUTION: Before performing the following job, you **MUST** be dressed in full protective clothing with faceshield lowered.

Equipment and Personnel Two firefighters in full protective clothing: one needed for ordinary, inexpensive door; both needed for more sturdy door
 Selection of forcible entry tool(s)
 Out-swinging door(s) to be forced

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
1 Size up the situation	1 a. Door tried b. Door construction examined c. Lock examined		
2 Adjust your protective gear.	2 a. Faceshield lowered b. Gloves donned		
3 Insert blade of tool(s) in door.	3 (Ordinary door) a. Between door and jamb b. Near lock (Sturdy door) a. Between door and jamb b. One tool just above lock c. Second tool just below lock		
4 Force the tool blade in.	4 a. Against rabbet or stop b. Worked, pushed, or driven in with appropriate tool		
5 Move the door and jamb apart.	5 (Ordinary door) a. Applying leverage to tool bar b. Prying away from door (Sturdy door) a. Alternately prying with one tool b. Catching bite with second tool		
6 Open the door.	6 a. When lock has cleared keeper b. Pulling open or prying open with another tool		

FORCE AN IN-SWINGING DOOR (STOPPED JAMB)

Introduction Doors having stopped jambs and that open away from the firefighter are more difficult to force than those that open toward the firefighter. As in forcing doors that open toward you, several forcible entry tools may be used for this operation. Regardless of which tool is selected, however, the procedure is the same.

CAUTION: Before performing the following job, you **MUST** be dressed in full protective clothing with faceshield lowered.

Equipment and Personnel One firefighter in full protective clothing
 Selection of forcible entry tools
 In-swinging door(s) with stopped jamb

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
1 Size up the situation	1 a. Door tried		
	b. Door construction examined		
	c. Door lock examined		
2 Adjust your protective gear.	2 a. Faceshield lowered		
	b. Gloves donned		
3 Loosen or remove the door stop.	3 a. Paint or varnish seal broken		
	b. Loosened at lock or removed		
4 Pry the door away from the jamb.	4 a. Blade between door and jamb		
	b. Initial pry when blade is halfway inserted		
	c. When full bite behind door		
	b. Until bolt passes keeper		
5 Open the door.	5 Pushed inward		

FORCE AN IN-SWINGING DOOR (RABBETED JAMB)

Introduction Doors having rabbeted jambs and that open away from the firefighter can be more easily forced with two tools and two firefighters. Even with two tools, however, forcing this type of door construction can be difficult. Several forcible entry tools may be used for this operation. Regardless of which tool is selected, the procedure is the same.

CAUTION: Before performing the following job, you MUST be dressed in full protective clothing with faceshield lowered.

Equipment and Personnel Two firefighters in full protective gear
 Selection of forcible entry tools
 In-swinging door(s) with rabbeted jamb

Students Name _____

Instructors Name _____

Date _____

Job Steps	Key Points	PASS	FAIL
1 Size up the situation	1 a. Door tried		
	b. Door construction examined		
	c. Door lock examined		
2 Adjust your protective gear.	2 a. Faceshield lowered		
	b. Gloves donned		
3 Spread the jamb	3 (1st firefighter)		
	a. Tool blade flat against door		
	b. Blade between rabbet and door		
	c. Short pries		
	(2nd firefighter)		
	a. Blade between door and jamb		
	b. Blade hammered well into opening		
4 (Both firefighters) Pry the jamb away from the door	c. Appropriate driving tool		
	4 a. When a full bite behind door		
5 Open the door.	b. Until bolt passes keeper		
	5 Pushed inward		

FORCE A CHECKRAIL (DOUBLE-HUNG) WINDOW

Introduction Checkrail (double-hung) windows may be either metal or wood. They consist of an upper sash and a lower sash that meet in the center of the window. The sashes may be locked together on the inside by a latch or bolt. When screens are used with these windows, they are external and often aluminum framed.

CAUTION: Never break glass with your hands, gloved or ungloved. Also, take special precautions when breaking windows above the ground floor to prevent a "flying guillotine" hazard to citizens and firefighters below.

Equipment and Personnel One firefighter in full protective clothing
 Forcible entry prying tool
 Pick-head axe
 Piece of wood or tool for propping the window open
 Checkrail window(s) to be forced

Students Name _____

Instructors Name _____

Date _____

Job Steps	Key Points	PASS	FAIL
-----------	------------	------	------

WOOD FRAME

1 Size up the situation	1 a. Window tried b. Window construction examined c. Window locking method determined		
2 Adjust your protective gear.	2 a. Faceshield lowered b. Gloves donned		
3 Remove the window screen if one is used	3 Frame pried or screening cut out		
4 Insert the tool blade	4 Between windowsill and center of bottom sash		
5 Force the window	5 a. Prying up against sash b. Until lock screws are pulled out and sashes separate.		
6 Raise the window sash.	6 a. Bottom sash b. Propped open to allow entry		

METAL FRAME

1 Size up the situation	1 a. Window tried b. Window construction examined c. Window locking method determined		
2 Adjust your protective gear.	2 a. Faceshield lowered b. Gloves donned		
3 Remove the window screen if one is used	3 Frame pried or screening cut out		
4 Position yourself to break the window glass	4 Windward side of glass		
5 Strike the glass	5 a. Top of pane b. With forcible entry tool c. Hands well above point of impact		
6 Remove the remaining glass from the frame	6 a. Tool run around frame b. All shards removed from frame		
7 Unlock the sashes.	7 a. Reaching through window opening b. Unlatching or unbolting		
8 Raise the window sash.	8 a. Bottom sash b. Propped open if necessary		

Job Steps	Key Points	PASS	FAIL
	NOTE: Generally, double hung windows are counter-weighted to keep them open. They will need propping only if the counter-weights are broken		

VENTILATE A PITCHED ROOF

Introduction The procedures for opening pitched roofs are similar to those for opening flat roofs, but additional precautions must be taken to prevent slipping.

Equipment and Personnel Teams of two firefighters in full protective gear and SCBA, relief rotated in
 Pitched training roof
 Extension ladder
 Roof ladder
 Pike pole
 Pick-head axe or power saw

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
1 Determine the location for the opening	1 a. Sizing up intensity of fire b. Sizing up extent of fire c. Identifying direction of wind d. Sizing up existing exposure hazards e. Identifying any obstructions		
2 Place and secure an extension ladder to access the roof NOTE: The ladder may be raised and secured by the instructor. If not, it should be carried, raised, and secured.	2 a. Team carry b. Team raise c. At least three ladder rungs extending d. Tied in		
3 Ensure that the power saw is operable.	3 a. Power source available (if electrically powered) b. Turned on briefly before ascending ladder		
4 Carry needed tools up the ladder.	4 a. Proper climbing technique b. Roof ladder hooks open and facing out. c. Axe blade away from body, pick-head in hand d. Pike pole pike forward, slid up rail e. Power saw off		
5 Assess the roof for warning signs of unsafe condition, and orally report to your instructor.	5 a. Identifying melting asphalt b. Identifying "spongy" roof (roof that has spring and rebound when walked upon) c. Identifying smoke coming from roof d. Identifying fire coming from roof e. Identifying downed or low electrical wires or connections, antennas, or lightning devices; broken skylights		
6 Place the roof ladder.	6 a. Hooks over roof peak b. To one side of the selected location c. Upwind d. Tested secure		

Job Steps	Key Points	PASS	FAIL
7 Sound to locate the roof supports	7 a. With axe b. Several locations c. Axe not raised above shoulder level		
8 Mark off the location for the opening	8 a. Scratching roof surface with axe pick b. Square or rectangular outline c. 4 x 4 feet (1.2 m by 1.2 m)		
9 Remove the outer roofing material.	9 a. Completely b. Cutting with axe blade c. Pulling material out of way with axe pick		
10 Cut each side of the decking with an axe or power saw.	10 a. Short strokes (axe) b. Not raised above shoulder level (axe) c. Guards in place (power saw) d. Diagonally e. Alongside rafter or joist f. Full outlined distance g. Joists uncut		
11 Practice relieving one another when cutting	11 a. Relief firefighter approaching ventilation firefighter from rear b. Relief firefighter placing hand on ventilation firefighter's shoulder c. Ventilation firefighter freezing in position until relief verbally indicates what to do		
12 Pry up and remove the sheathing boards.	12 a. Using axe pick b. Boards clear of work area		
13 Open the ceiling below.	13 a. After decking and sheathing fully cut b. Positioning self upwind c. With pike pole or other suitable tool d. Using blunt end of tool		

DEMONSTRATE MECHANICAL POSITIVE-PRESSURE VENTILATION

Introduction Positive-pressure ventilation requires placing a blower outside a structure and blowing air into a structure in which an opening has been made to allow smoke and gases to escape. This method is faster and better than negative-pressure ventilation, especially if the operation is coordinated so that ventilated rooms can be shut to increase the blower's effects.

Equipment and Personnel Two or three firefighters in full protective clothing and SCBA
 One or two smoke blowers
 Straight ladders or other means of support for ejectors
 Forcible entry tools as applicable
 Smoke-filled training structure
 Charged hoseline

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
1 Assess conditions and the structure to determine where to place blower(s)	1 a. Sizing up proximity and size of natural openings b. Identifying direction of wind c. Sizing up intensity of wind d. Sizing up position and intensity of fire e. Sizing up existing exposures		
2 Regulate the exhaust opening.	2 a. Making 75 to 150 percent as large as entry opening b. Closing all other exterior exits		
3 Place the blower	3 a. Carrying by handles b. Positioning on uninvolved (preferably windward) side of building c. Positioning several feet outside point of entry d. Ensuring that cone of air completely covers entry opening e. Positioning so that fan blows in		
4 Observe safety precautions.	4 a. Allowing no one near blades or in discharge area. b. Using explosion-proof blower motor and power cable connections c. Having a charged hoseline at point of entry		
5 Start the blower	5 a. Pulling on starter rope b. Standing to one side of discharge area		
6 Establish the desired draft path between the entry and exit openings.	6 a. Removing all obstacles to airflow b. Ensuring that air intake side of blower is unblocked and free of debris c. Creating an airflow path that is as straight as possible d. Closing or opening interior doors systematically as appropriate e. Keeping exit opening in proportion to entry opening		

Job Steps	Key Points	PASS	FAIL
7 Turn off the blower and disconnect it from the power source.	7 a. After smoke has been cleared from building		
	b. Turning blower switch to "off" position		
	c. Pulling on plug, not cord		

DEMONSTRATE MECHANICAL NEGATIVE-PRESSURE VENTILATION

Introduction Negative-pressure ventilation requires the placement of a fan or smoke ejector in a window or door blowing out of the structure and drawing smoke through the blower. Fresh air is drawn into the structure through a second opening, replacing the smoke and gases.

Equipment and Personnel Two or three firefighters in full protective clothing and SCBA
 One or two smoke blowers
 Straight ladders or other means of support for ejectors
 Forcible entry tools as applicable
 Smoke-filled training structure
 Charged hoseline

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
1 Assess conditions and the structure to determine where to place ejector(s)	1 a. Sizing up proximity and size of natural openings b. Identifying direction of wind c. Sizing up intensity of wind d. Sizing up position and intensity of fire e. Sizing up existing exposures		
2 Hang or place the exhausting smoke ejector.	2 a. Carrying by handle b. Placing in open window or door c. Placing to exhaust in same direction as wind d. Placing as high as possible e. Supporting appropriately		
3 Block off the opening around the exhausting ejector fan.	3 a. With salvage covers or other material b. Completely		
4 Open a second door or window for air	4 a. In line with exhausting ejector b. Farthest from exhausting ejector		
5 Place intake ejector if necessary.	5 a. Only if natural wind is too light to be effective b. Positioning in second door or window opening, or several feet (meters) from opening c. Positioning so that fan blows into structure		
6 Observe safety precautions.	6 a. Allowing no one near blades or in intake or discharge areas b. Using explosion-proof blower motor and power cable connections c. Having charged hoseline at intake opening		

Job Steps	Key Points	PASS	FAIL
7 Establish draft path.	7 a. Allowing no recirculation at exhausting ejector b. Creating an airflow path that is as straight as possible c. Removing all obstacles to airflow d. Opening or closing appropriate inside doors e. Keeping discharge and intake areas unobstructed		
8 Connect the ejector(s) to the power source, and turn on.	8 a. First ensuring that no personnel are near the intake and discharge areas b. Turning ejector switch(es) to "on" position		
9 Turn off ejector(s) and disconnect from power source.	9 a. After smoke and gases are cleared from building b. Turning ejector switch(es) to "off" position c. Pulling on plug, not cord		

SAFELY MOUNT, USE APPARATUS SAFETY EQUIPMENT, AND DISMOUNT APPARATUS

Introduction The most common dangerous experience faced by all firefighters is riding the apparatus to and from emergency calls. To ensure personal safety, it is essential that all firefighters know and practice safety on all fire service apparatus.

Equipment and Personnel Response team
 Protective clothing and SCBA
 Ear and eye protection
 Apparatus

Students Name

Instructors Name

Date

Job Steps	Key Points	PASS	FAIL
-----------	------------	------	------

WHEN DISORIENTED

1 Don protective clothing.	1 Bunker coat and pants, boots, hood, helmet		
2 Mount the apparatus.	2 Using handrails		
3 Don SCBA (if seat-mounted).			
4 Use apparatus safety equipment.	4 a. Connecting seat belt		
	b. Donning ear protection (if noise level warrants or if in jump seat)		
	c. Lowering faceshield (if in jump seat)		
	d. Locking safety gates or bars (if in jump seat)		
5 (Officer in charge) Signal driver.	5 When all firefighters are fully clothed and in secure positions		
6 (Driver) Drive the apparatus.	6 Distance and destination specified by instructor		
7 Release apparatus safety equipment	7 When apparatus has come to a full stop		
8 Dismount the apparatus	8 Using one of the following methods: Ordinary dismount: using handrail Energized dismount: demonstrating method of jumping clear when apparatus may be in contact with energized electrical wires		
9 Don SCBA (if not seat-mounted)	9 Per department SOPs		